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USSR Report

AGRICULTURE

No. 1297



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MAJOR CROP PROGRESS AND WEATHER REPORTING

EXTENSIVE USE OF INDUSTRIAL TECHNOLOGY IN SUGAR BEET CULTIVATION REQUIRED

Moscow SEL'SKAYA ZHIZN' in Russian 31 May 81 p 1

[Article by S. Luzgan, Ukrainian SSR: "Disruptions in the Beet Production Line"]

[Excerpt] The machine operators in Zhashkovskiy Rayon, where all of the beets are cultivated using the industrial technology, were some of the first to complete the formation of their plant density. The beet growers in Zolotonoshskiy and other rayons are nearing completion of this work. Unfortunately, however, it bears mentioning that there are some farms in the oblast which are ignoring the use of progressive methods that serve to lower manual labor expenditures. At a number of kolkhozes and sovkhoses in Tal'novskiy Rayon, for example, the plantings turned out to be crowded. At the present time, they are relying upon use of the hoe and, as a result, the proper plant density has been achieved only on six out of every ten hectares. And the best periods for this work are coming to a close.

The tending of the sugar beet plantings on many farms in Vinnitskaya Oblast is being dragged out and indeed it is here that the largest plantings of this crop in the republic are located. There are many farms and even rayons throughout the oblast which have not chosen to employ the progressive technology. Many years ago the plantations were assigned to mechanized and field crop teams, with the tractor operators carrying out individual agricultural methods. The entire complex of operations associated with the cultivation of beets became the responsibility of individual teams. There was no single individual on the plantations who bore responsibility for the final results. Thus it is not surprising to learn that under such conditions considerable reliance was placed upon the use of inefficient manual labor for forming the plant densities.

Disruptions in the beet production line have been particularly noticeable on a number of farms in Kazatinskiy, Kalinovskiy, Barskiy, Pogrebishchenskiy and Khmel'nitskiy Rayons. And these are precisely the rayons which have fallen behind in carrying out the more important operations associated with tending the plantations. Only rarely is use being made here of thinners when forming the plant densities. And yet fine experience is close at hand: the leading farms, where the progressive technology for cultivating this important technical crop was introduced into operations on an extensive scale, are setting a good example in carrying out this important work on a timely basis and with minimal expenditures of labor.

Last year the machine operators in Mironovskiy Rayon in Kiyevskaya Oblast grew all of their beets using the industrial technology and they achieved fine results

despite complicated weather conditions. This year the beet growers in Belotserkovskiy Rayon are employing machines for carrying out all of the work. As a result, no longer is there a requirement for forming the density of the plants. At the same time, the farms in Pereyaslav-Khmel'nitskiy, Yagotinskiy and Skvirskiy Rayons have fallen behind noticeably with regard to the thinning out of their seedlings. The reason -- they relied upon manual labor. True, the progressive technology is being employed this year on roughly one half of the beet planting areas. But this is clearly inadequate. Indeed the oblast has sufficient logistical resources at its disposal for ensuring that almost all of the beets are cultivated using the progressive method.

Such oblasts as Nikolayevskaya, Odesskaya and Zhitomirskaya warrant special mention. Comparatively small areas have been set aside here for the sugar beets and thus the possibility exists of having machines bear the entire burden with regard to the cultivation of this crop. Unfortunately, this has not happened. For example, the mechanized method was employed for thinning out only 15 percent of the plantings in Novograd-Volynskiy Rayon of Zhitomirskaya Oblast. Poor use is being made of machines in Lyubarskiy and Andrushevskiy Rayons. On a number of farms the kolkhoz members are thinning out the beets in the absence of preliminary post-seedling harrowing and blind cultivation of the plantings. They turned out to be severely crowded and contaminated by weeds. It is for this reason that the output norms are not being fulfilled and the schedules for forming the plant densities are being dragged out. This can lead to a reduction in yield.

This year the Ukrainian farmers must increase their sugar beet procurements by 4.5 million tons above the average annual level achieved during the past five-year period and raise the overall yield to 50.5 million tons. In order to achieve these indicators, it will be necessary to obtain an average of 312 quintals of root crops from each hectare. Today the necessary conditions are being created for obtaining the planned yield. The winners will be those who carry out all of the agricultural measures associated with tending the plantations during the best periods.

7026

CSO: 1824/422

MAJOR CROP PROGRESS AND WEATHER REPORTING

TENDING OF SUGAR BEET CROP IN THE UKRAINE REVIEWED

Kiev PRAVDA UKRAINY in Russian 11 Jul 81 p 3

[Article by A. Denisenko, Deputy Minister of Agriculture for the Ukrainian SSR: "Care and Concern for the Beet Fields"]

[Text] Sugar beets is the principal technical crop of our republic. It occupies 1.76 million hectares -- one half of the country's beet fields. The degree to which industry and the population are supplied with sugar is largely dependent upon the work performed by the Ukrainian beet growers.

This year the experts out on the Ukrainian beet plantations have vowed to obtain 312 quintals of the sweet roots from each hectare and to ship 50.51 million tons of raw materials to the sugar plants. Their task: to obtain 30.6 quintals of sugar from each hectare.

Such obligations are fully realistic. This year the beets are being grown following predecessor crops that were somewhat better than in past years. Deep autumn plowing was carried out on a timely basis in almost all areas, an average of 36 tons of organic and approximately 13 quintals of mineral fertilizer were applied to each hectare and liming and gypsuming of the soil were carried out on an area in excess of 350,000 hectares. Mineral fertilizer -- 2-3 quintals per hectare -- was applied to the rows during sowing.

According to the observations of specialists, the best plantations are those where a high overall culture of farming is being employed. Today the chief concern is that of tending the plantings. A great amount of work has already been carried out. Pre-seedling harrowing was carried out on all of the areas and at those locations where rain fell the harrows were placed in operation a second time. It bears emphasizing that the cold spring weather lowered the intensity of germination not only for the beets but also the weeds. Thus the pre-seedling harrowing was 2-3 times less effective than during normal years. This then explains the raised level of weediness in the beet fields compared to previous years.

Cropping power is dependent to a decisive degree upon the timely and correct formation of the plant densities. For the purpose of accelerating this work, mechanized thinning out of the plantings was carried out on 802,000 hectares. In some rayons, for example in Grebenkovskiy Rayon in Poltavskaya Oblast and in

Mogilev-Podol'skiy and Bershadskiy Rayons in Vinnitskaya Oblast, electronic thinners were employed for forming the planting densities.

The farms in Ternopol'skaya, Khar'kovskaya, Khmel'nitskaya, Kiyevskaya, Ivano-Frankovskaya, Vinnitskaya and Volynskaya Oblasts, having employed along-the-row thinners and other mechanisms, formed their planting densities in a timely manner. Yet this work was dragged out in Odesskaya and Nikolayevskaya Oblasts. Such a mistake must serve as a serious lesson for the future.

This year there has already been a third loosening of the inter-row spacings and a second top dressing applied to the plants. The plantations on a majority of the farms in Ternopol'skaya, Cherkasskaya, Khar'kovskaya, Dnepropetrovskaya and Volynskaya Oblasts are in good condition. At the same time, by no means have the weeds been removed from all of the beet growing areas in Zhitomirskaya, Kirovogradskaya, Poltavskaya, Sumskaya, Nikolayevskaya and Chernigovskaya Oblasts. If radical corrective measures are not undertaken in these areas, the loosening of the inter-row spacings and the inspection of the beets may not take place until the second, and in some areas, the third 10-day period in July. And the beet growers are indeed aware that the mentioned work must be completed prior to the commencement of the grain harvest operations.

In order to ensure that such an incorrect practice is not repeated in the future, use should be made of the progressive technology in a more bold and more extensive manner. Last year it was employed for the first time in our republic on an area of 37,000 hectares. The results are gratifying. In Mironovskiy Rayon in Kiyevskaya Oblast, for example, each hectare on which beets are being grown using the industrial technology furnished 377 quintals of roots -- 46 more quintals than the amount obtained in 1979 when the conventional cultivation method was employed. The production cost per quintal of raw material decreased from 2 rubles and 21 kopecks to 1 ruble and 99 kopecks.

In our republic the new technology is being used for growing sugar beets on 138,000 hectares. The condition of the plantings in these areas is for the most part good. On a majority of the areas, a planting density formed in May using mechanisms does not require thinning out. The plantations are tended, a second top dressing is applied, a third inter-row loosening is carried out and protection is provided against aphids, leaf beetles and other pests and diseases.

Preliminary inspections reveal that prior to the beginning of July the condition of the republic's beet plantings is somewhat better than that of last year -- the weight of both the roots and haulm is higher.

There is one alarming fact. The weather conditions during May and June brought about the appearance of the beet leaf aphid on a considerable portion of the plantings, the mass laying of eggs by flies and beetles and the hatching of the larvae of the beet and other leaf beetles. Favorable conditions were created in a number of western oblasts for the spread of powdery mildew and virus diseases and the spread of the root aphid is possible in oblasts where a steady raised temperature prevails. The plant protection stations and kolkhoz and sovkhoz leaders and specialists must establish strict control over the appearance of the beet pests and diseases and they must undertake all of the measures required to destroy them in their areas of concentration and thus prevent their spread.

The front of the harvest work is expanding with each passing day throughout the republic. However, the beet plantations must not be forgotten during this tense period. Each hectare of land must be maintained in a loose and weed-free state; preparations are already being made today for the harvest work; everything needed must be prepared in advance so that the crop can be harvested and delivered to the receiving points during the best periods and strictly in accordance with the established schedule. There can be no doubt but that the republic's beet growers will cope successfully with this important work and hold to their promise in an honorable manner.

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CSO: 1824/422

MAJOR CROP PROGRESS AND WEATHER REPORTING

UKRAINIAN FARMS USE IPATOVO METHOD IN HARVEST

Moscow SEL'SKAYA ZHIZN' in Russian 5 Aug 81 p 1

[Article by S. Luzgan: "Each Hour is Costly"]

[Excerpts] It has been calculated that because of the prolonged time periods for the harvest which, unfortunately, have lasted 25-30 days in the past, the farms lose two and more quintals of grain from each hectare during harvesting, that is, more than 3 million tons in the republic as a whole. One steppe oblast of the Ukraine produces this amount of grain.

This year the Ukrainian grain growers have resolved to reduce the harvest times considerably. The farms have received more than 5,000 new combines for the harvest. Machine operators of the southern and forest steppe oblasts have devoted special attention to extensive introduction of the Ipatovo method of organizing the harvest and shift utilization of the combines. More than 13,000 harvest-transport detachments have been created in the republic.

It is already possible to say that many farms of the southern and southeastern oblasts have honorably waged the battle for grain in the first year of the Eleventh Five-Year Plan. But it should be noted that each year, in the main grain growing region of the Ukraine, not everyone has acted in a thoughtful and organized way and they have not always utilized harvesting equipment and transportation skillfully.

It was noted at a recent plenum of the Central Committee of the Communist Party of the Ukraine that because of the advancing science of farming, concern for the seeds and efficient organization of work, many kolkhozes and sovkhoses are obtaining good yields. At the same time, various shortcomings in conducting the harvest have been revealed on certain farms of Odesskaya, Nikolayevskaya and a number of other oblasts.

The positive experience of the southern workers and also their mistakes were studied by many farms of the central oblasts of the Ukraine. If one compares this year's harvest with the preceding one, one must admit that it has taken place in a more organized place in this region.

We drove around the fields of the farms early in the morning with the secretary of the party committee of Tarashanskiy Rayon in Kievskaya Oblast, N. Grigorenko. It was pleasant to see that the harvest was in full swing on the fields.

"The farms of our rayon will finish mowing today or tomorrow," said N. Grigorenko. "And in three or four days we shall also be able to handle the threshing . . ."

The harvest is proceeding in an organized way in Cherkasskaya Oblast which is competing with Kievskaya Oblast. Here with favorable weather the harvesting aggregates can take care of a field in several days.

The harvest is proceeding better than in past years in Vinnitskaya, Khmel'nitskaya and Poltavskaya oblasts. The weather is not hampering the farmers. As calculations show, the harvest could have been conducted more rapidly in Kievskaya Oblast.

If one analyzes the summaries of the output for one combine, one discovers that in Chernogovskaya, Khmel'nitskaya, Vinnitskaya and even Cherkasskaya and Kievskaya oblasts, which are already completing the harvest, the average indicators could have been higher. This happens because frequently the Ipatovo method is applied perfunctorily and there is no coordination of its parts. The shift method of harvesting is being poorly introduced in the central oblasts. A number of farms have still not organized two-shift work.

The poor-quality preparation of the combines and poor technical servicing of them in the field are also having their effect. For example, there were serious shortcomings in the preparation of the grain harvesting equipment on the farms of Ichnyanskiy, Talalayevskiy, Varvinskiy and several other rayons of Chernigovskaya Oblast. More than 30 percent of the harvesting aggregates in Khmel'nitskaya Oblast could not be used in the harvest. The engineering service of the kolkhozes and sovkhozes and the rayon agricultural administrations are putting up with this situation. Even during the course of the harvest the oblast peoples' control committee penalized the head engineer and the acting chairman of the Volochisskiy Rayon association of Sel'khoztekhnika, I. Stadratyuk and V. Bachmaga, and the head engineer of the Cherovetskiy Rayon association of Sel'khoztekhnika, G. Vatchenko.

The grain has been mowed from 13 million hectares on the farms of the republic and almost 12 million hectares have been threshed. The flow of grain to the elevators is increasing. The farms of the republic have already sold about 6 million tons of grain.

The first in the republic to fulfill the plan for the sale of grain to the state were agricultural workers of Ochakovskiy Rayon in Nikolayevskaya Oblast. They have sent 26,500 tons to the elevators. The farms of the rayon fulfilled the plan for storing seeds and created insurance funds. The sale of the grain to the state is continuing.

Automotive transportation workers of the republic Goskomsel'khoztekhnika are delivering the grain at rapid rates. They already have 3 million tons of shipped grain to their credit. The use of truck trains and the organization of labor according to the brigade contract method contribute to their success. Almost 5,000 driver collectives are working according to these progressive methods.

Goskomsel'khoztekhnika transportation is being utilized efficiently in Khersonskaya, Dnepropetrovskaya, Zaporozhskaya and Kirovogradskaya oblasts.

11772

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MAJOR CROP PROGRESS AND WEATHER REPORTING

CRIMEAN HARVEST IN FULL SWING

Moscow SEL'SKAYA ZHIZN' in Russian 7 Aug 81 p 1

[Article by A. Soldatskiy (Krymskaya Oblast)]

[Excerpts] Harvest is in full swing on the fields of the Crimea. The leading machine operators have already threshed 5,000-6,000 quintals of grain. The shift method makes it possible to utilize equipment 24 hours a day and to achieve a high output from each aggregate. After the threshing, the soil is prepared for the future harvest. While proceeding with the harvest, the farms of the oblast are selling grain to the state.

Farmers of the Crimea have exerted a great deal of effort to increase the yield. Not a single hectare of planted land has gone without top dressing and all fields were treated for pests and plant diseases. But in the south of the Ukraine it is frequently the case that the immense amount of labor invested in the grain fields throughout the year produces less return because of the dry winds. And again this year there are fields which were expected to produce 50-60 quintals of grain per hectare and are yielding only 40-45. One recalls the Crimea in the recent past when the majority of the farms were satisfied with 22-25 quintals. One now sees the effect of skillful selection of strains, efficient utilization of fertilizers, the selection of a predecessor and the time periods and the quality of the work. Hence also the result. This year the oblast committed itself to gathering 2 million tons of grain and selling the state no less than 712,000 tons of it. And to accomplish this it is necessary to select each spike and protect it down to the last kernel.

Formerly the main grain crop in the Crimea was winter wheat. And it is still a key crop now. But this year more attention was devoted to barley. It was planted on 136,700 hectares. And this was taken into account when drawing up the plan for harvesting work. Without any "warmup," from the first days of the harvest the farms, as it were, fell upon the winter barley. They did not even wait for it to ripen fully. As soon as the grain reached the stage of waxy ripeness, all the reapers and most of the re-equipped combines raced out into the fields.

Spike crops alone occupy 613,700 hectares in the Crimea. The farms have created 407 harvest-transport detachments. The work is being done comprehensively. In order to reduce losses, they are relying on individual harvesting most heavily.

The hum of harvesting equipment can be heard day and night from the Crimean foothills to the northern borders of the peninsula. Because of the effort and mastery of the farmers, the grain from the new crop is continuously going to the threshing floor and to the grain bins of the homeland. The oblast is obtaining more than 31 quintals of winter barley per hectare. They do not expect the wheat to produce less.

Another fact is quite important. City dwellers are participating actively in the harvest. Tractor operators, combine operators and truck drivers have been included in the harvest and transport detachments. Students of agricultural institutes and pupils in special vocational and technical schools have come to the assistance of the rural workers. More than 700 machine operators came from the western oblasts of the Ukraine where the grain ripens later. All this is making it possible for the farms of the oblast to utilize the technical equipment 24 hours a day.

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CSO: 1824/420

MAJOR CROP PROGRESS AND WEATHER REPORTING

BRIEFS

WEED CONTROL MEASURES REQUIRED--The rain that has fallen recently in a systematic manner has favored the development of the winter crops and the appearance of healthy seedlings for the grain, pulse and forage crops, sugar beets and sunflowers. However, these weather conditions have also promoted the rapid development of weeds. On those fields where urgent measures aimed at destroying these weeds have not been undertaken or are not now being undertaken, considerable shortfalls in the crops may ensue. In connection with this danger, the farm leaders and specialists must devote special attention to the carrying out of a number of important field crop husbandry operations. [Text] [Kishinev SOVETSKAYA MOLDAVIYA in Russian 24 May 81 p 2] 7026

TENDING OF SUGAR BEETS--On the principal beet areas, the plants are in the phase of 2-3 pairs of leaves. At the present time, each day of delay in the formation of the planting densities can result in a considerable reduction in the yield of roots. Meanwhile, according to operational reporting, the optimum density for the beet plantings for the republic on the whole has been formed on only one fifth of the areas being used for this crop. As yet, no work has been carried out in this regard in Brichanskiy, Orgeyevskiy or Sholdaneshtskiy Rayons. The thinning out of the plantings has just now commenced in Sorokskiy, Dondyushanskiy, Kamenskiy, Rezinskiy, Teleheshtskiy and Ungenskiy Rayons. All possible measures must be undertaken aimed at ensuring that the formation of the planting densities is completed during the next few days, with no less than 100,000-110,000 plants remaining per hectare. In those areas where such work is required, those tracts of land which were washed out by driving rainfall must at the same time be "repaired." Those tracts on which it is impossible to form the minimal permissible density -- 60,000-70,000 plants, uniformly disposed on each hectare -- re-sowing should be carried out. Plantations contaminated by dicotyledonous weeds must be treated with the herbicide betanal. In order to destroy the crust which forms following rainfall and also for combating root borers and click beetles, the soil in the inter-row spacings should be loosened at the very first opportunity, with a top dressing of mineral fertilizer being applied simultaneously, especially in those areas where an insufficient amount of such fertilizer was applied in the autumn. The plantations must be inspected regularly and measures must be organized aimed at combating the plant pests. [Excerpts] [Kishinev SOVETSKAYA MOLDAVIYA in Russian 24 May 81 p 2] 7026

BEET PROTECTION AGAINST PESTS -Usually the farm agronomists control the appearance of the opaque carrion beetle on beet plantings. Distinct from past years and owing to the favorable weather, this pest has "infested" the cereal grain crops,

perennial grasses and roadside areas. The specialists attached to the raysel'khozkhimiya service and the kolkhoz and sovkhos agronomists must focus attention on these areas where the opaque carrion beetles are accumulating and undertake immediate measures aimed at destroying them. At the same time, there should be no relaxation of control over the beets, the seedlings of which have already appeared in the southern and central regions of the republic. The number of pests out on the beet fields presently exceeds the critical figure (more than two specimens per square meter) and in Minskaya Oblast there are 12-16 specimens, Brestskaya Oblast -- 10 and in Grodnenskaya Oblast -- 2-5 specimens per square meter. The larvae of the pest have already appeared here and thus the degree of harm to be caused by them is increasing. A threat of severe damage to or destruction of the beet plants is being created. One of the following preparations can be employed for combating the opaque carrion beetle: vofatox -- a 30 percent wetting powder (2 kilograms per hectare); metaphos -- a 40 percent emulsifying concentrate (1 kilogram); phosphamide (BI-58 rogor) -- a 40 percent emulsifying concentrate (1 kilogram); anthio -- a 25 percent emulsifying concentrate (1.5 kilograms); phozalone -- a 35 percent emulsifying concentrate (2.5 kilograms per hectare). For destroying the opaque carrion beetle on other fields in a crop rotation plan, especially on grain fields, use can be made of a combination of chemical weed control work and insecticide applications. [by N. Kharchenko, Candidate of Biological Sciences and head of the Forecast Laboratory at the Belorussian Scientific Research Institute of Plant Protection and N. Turishcheva, Candidate of Agricultural Sciences and senior scientific worker in the Laboratory for Technical Crops] [Text] [Minsk SEL'SKAYA GAZETA in Russian 28 May 81 p 2] 7026

THINNING OUT OF SUGAR BEETS--A very important sector of work -- the thinning out of the sugar beets. The plantings are being thinned out rapidly on farms in Kapsukskiy, Ionishkskiy and Alituskiy Rayons. On the other hand, this work is being carried out slowly on a number of farms in Kupishkskiy, Birzhayskiy, Raseynskiy and Pakruoyskiy Rayons. In the interest of accelerating the thinning out of the beets on areas sown using single-shoot seed, more productive use should be made of the available automatic thinners. They operate better on plantings the soil of which has been packed down. The packing is carried out during the middle of the day when the plants are more limp and the leaves flexible. The warm weather has activated the plant pests. On the spring crop fields, aphids and grain sawflies have already appeared and on the beet plantings -- gnats and dung beetles. The farm specialists must keep the plantings under constant observation and spray them with insecticides in a timely and high quality manner. The seed clover must be sprayed using the proper insecticide. [Excerpts] [Vilnius SOVETSKAYA LITVA in Russian 4 Jun 81 p 1] 7026

INDUSTRIAL TECHNOLOGY FOR BEETS--Voronezh--The machine operators at the Voronezh Druzhba Kolkhoz have completed forming the density for their sugar beet plantings. In all, they required 3 days for working 1,150 hectares. A great amount of experience has been accumulated here in growing this valuable technical crop using the industrial technology. It has been adopted by neighboring farms -- the kolkhozes and sovkhoses in Anninskiy Rayon and also by other beet growing farms in the oblast. [Moscow KRASNAYA ZVEZDA in Russian 16 Jun 81 p 1] 7026

VORONEZHSKAYA OBLAST BEET PROBLEMS--The summer fields are fields of hope. They provide the basis for harvest forecasts. They require repeated tending and a great

amount of work. Approximately 250,000 hectares have been set aside for beets in Voronezhskaya Oblast. And in order to obtain approximately 4.5 million tons of sweet roots from them -- such is the obligation of the beet growers -- maximum amount of work must be carried out today. What is hindering the further dissemination of the leading technology? For all practical purposes, the complete mechanization of the cultivation of plantations has been carried out only in one rayon -- Anninskiy Rayon -- which has 14,500 hectares of sugar beets. The arithmetic is simple. The oblast has been supplied with 94 tons of herbicides for use on the seedlings. However, Anninskiy Rayon alone required 78 tons of this amount. There is still another reason -- a shortage of seed. The plants are continuing to supply mainly multiple-shoot seed, which require great expenditures of manual labor during the tending of the plantings. The fault lies mainly with the farm leaders and specialists. Relying upon assistance being furnished by their patrons, many of them failed to display proper concern for the extensive use of mechanisms and progressive technologies. For the oblast as a whole, the tending of the plantings is being dragged out. And this can result in a shortfall in yield. The farm leaders and specialists and the rural party organizations must undertake measures aimed at correcting this situation. [by A. Starukhin, Voronezhskaya Oblast] [Excerpts] [Moscow PRAVDA in Russian 28 Jul 81 p 1] 7026

MOLDAVIAN SSR BEET PLAN--Kishinev, 22 Apr--For the first year of the five-year plan, the republic's farmers have promised to supply 4.1 million tons of sugar beets -- almost one third more than last year. The farmers in Faleshtskiy Rayon are setting a fine example in the active campaign to raise the productive force of a hectare of land used for the growing of beets. They were the first in the republic to complete the sowing of this valuable technical crop and they did so during the best agrotechnical periods. The system of improved soil preparation, as recommended by the All-Union Scientific Research Institute of Sugar Beets, has been introduced into operations on all of the farms here. In accordance with the cartograms, full dosages of mineral fertilizer have been applied, with poultry manure being used in all areas as drill row fertilizer during sowing operations. [by N. Marfin] [Text] [Moscow SEL'SKAYA ZHIZN' 23 Apr 81 p 1] 7026

BEET ACREAGE EXPANDED--Vilnius, 20 May--The formation of 500 mechanized detachments for the growing of sugar beets has been completed at kolkhozes and sovkhoses in Lithuania. The farmers in Vilkavishskiy Rayon, where one out of every two farms specializes in the growing of this crop, prepared very thoroughly for the sowing work. The detachments include teams for preparing the soil for sowing, for carrying out transport work and for caring for the equipment. The rayon agrochemical service prepared recommendations for applying mineral fertilizers and herbicides. This year the republic's beet fields will be expanded to 40,000 hectares. [Text] [Moscow SEL'SKAYA ZHIZN' in Russian 21 May 81 p 1] 7026

MECHANIZED BEET CULTIVATION--Vilnius, 30 May--The beet growing farms in Lithuania have completed the cultivation and thinning out of their plantings and they surpassed last year's schedules in doing so. This is the result of the all-round mechanization of operations out on the plantations. [Excerpt] [Moscow SEL'SKAYA ZHIZN' in Russian 21 May 81 p 1] 7026

NEW SUGAR BEET HYBRID--Minsk, 5 May--One of the first products of the Belorussian plant breeders -- the single-shoot Gamusovskiy Hybrid-8 -- will be used this year

throughout the republic on more than 1,000 hectares set aside for commercial sugar beets. The results of tests carried out at state strain testing stations and on farms have shown that in terms of cropping power it is not inferior to the polyspermous standard varieties regionalized here and it even surpasses some of them in terms of sugar yield. But the chief advantage of the single-shoot beet lies in the fact that its cultivation does not require laborious manual operations associated with the thinning out of the plantings and, in addition, the conversion of the beet growing work over to an industrial technology is facilitated. The Sveklovichnyy Specialized Sovkhoz in Minskaya Oblast is reproducing the seed for this new hybrid and supplying it to the kolkhozes and sovkhozes. [by V. Legan'kov] [Text] [Moscow SEL'SKAYA ZHIZN' in Russian 6 May 81 p 1] 7026

SUGAR BEET SOWING COMPLETED--Vinnitsa, 25 Apr--The farmers in Yampol'skiy Rayon were the first in Vinnitskaya Oblast to complete their sowing of sugar beets. This year the progressive method for cultivating this technical crop is being introduced in operations on all farms in Yampol'skiy Rayon. Here the plans call for 50 quintals of sugar to be obtained per hectare. A fine base was created for this crop: 52 tons of organic and more than 18 quintals of mineral fertilizer were applied to each hectare of beet planting. The beet growers are proceeding with the tending of the crop. [by Ya. Korol'] [Text] [Moscow SEL'SKAYA ZHIZN' in Russian 26 Apr 81 p 1] 7026

HARROWING OF BEET PLANTATIONS--Kirovograd, 21 May--The majority of the beet growing farms in Dolinskiy, Ustinovskiy, Novoukrainskiy, Novoarkhangel'skiy, Ul'yanovskiy and other rayons are coping in a timely manner with the pre-seedling and seedling harrowing of the plantations. The beet growers immediately switched over to the blind cultivation of the plantings and to the formation of the computed density for the plants. [Excerpt] [Moscow SEL'SKAYA ZHIZN' in Russian 22 May 81 p 1] 7026

BEET WEIGHT TRIPLED--Cherkassy--The oblast's machine operators have completed their work of tilling the inter-row spacings and applying a top dressing to the beet plantations. The extensive use of the industrial technology for growing the sweet roots and the use of high quality seed are producing fine results. At the present time, each root weighs three times more than the usual weight. [Text] [Moscow TRUD in Russian 19 Jul 81 p 1] 7026

BEET SALES TO STATE--Kiev--The mass tending of the sugar beet plantings has commenced in the Ukraine. Specialized brigades and teams are organizing the work in accordance with the Ipatovo method and carrying out all operations as part of an overall complex of work. This year the republic's farmers have vowed to sell more than 50.5 million tons of beets to the state. [Text] [Moscow TRUD in Russian 30 May 81 p 1] 7026

GEORGIAN SUGAR BEET PLAN--Kareli--The sowing of sugar beets has been completed in the Kartalinskaya Valley. The machine operators have re-equipped the equipment for cultivating the plantings. The Georgian farmers have vowed to harvest approximately 125,000 tons of roots this season. [Text] [Moscow GUDOK in Russian 21 Apr 81 p 1] 7026

SPRINKLER IRRIGATION--Odessa--Sprinkling machines are in operation on the Black Sea fields that have been planted in winter crops. Each hectare of the future grain fields will receive a full dose of vital moisture--up to 700 and more cubic meters--in order to make up for the hot and dry weather. More than 170,000 hectares of arid land is now being irrigated in Odesskaya Oblast. [Text] [Moscow TRUD in Russian 2 Aug 81 p 1] 11772

UKRAINIAN HARVEST--Kiev--The harvest has entered the final stretch in the Ukraine. Yesterday the machine operators began to mow the early grain crops from the last million hectares. [Text] [Moscow TRUD in Russian 3 Aug 81 p 1] 11772

REPEAT PLANTINGS--Kiev--Yesterday farmers of the Ukraine finished planting repeat and after harvest crops on 1 million hectares. Many fields have turned green again. They plan to obtain a total of no less than 15 million tons of green mass of the second harvest from this land. [Text] [Moscow TRUD in Russian 8 Aug 81 p 1] 11772

RIPE CROPS--The sun barely rises over the horizon and the steppe begins to breathe heat. And during the day, when the sun reaches its zenith, even the soil is scorched. But nonetheless the grain is standing high and the kernels in the spikes of wheat are filling out rapidly. It has begun to take on a bronze coloring earlier than usual. The barley turned white earlier and the peas have ripened. "The agronomists of the farm and the members of the rayon harvest staff are constantly observing each field," says the first secretary of the Golopristsanskiy party raykom, N. A. Zienko. "As soon as the grain reaches waxy ripeness we put the reapers to work. We try to make sure that it does not ripen on the root--under this year's conditions when the temperatures are high and there are frequent winds, we want to avoid losses. We gather everything into swathes." This year the kolkhozes and sovkhoses of Golopristsanskiy Rayon will have to harvest the grain from 49,800 hectares, including 41,000 hectares with early grains. The farmers have committed themselves to threshing 30 quintals of grain from each hectare. The main method of harvesting is the individual method, for which 200 reapers have been prepared. There are 240 combines for picking up and threshing the grain. All of the grain will be gathered in 12-14 working days. Along with the harvesting, the straw is being put into ricks and the soil is being prepared for the next crop. The first thousands of hectares of early spike crops and peas have been placed into swathes in Khersonskaya Oblast, and the time has come for the second mowing of alfalfa which covers larger areas now. Transportation is needed for preparing hay, and there is not enough of it. And therefore almost 500 special transportation detachments have been created in the cities to help the farmers. [Excerpts] [Moscow SEL'SKAYA ZHIZN' in Russian 1 Jul 81 p 1] 11772

DNEPR HARVEST--Dnepropetrovsk--The harvest in the Dnepr area is expanding and gathering speed. It is marked by high enthusiasm and mass labor successes. In a couple of days almost half the grain spike crops were mowed. The grain was threshed on 150,000 of the 803,000 hectares planted in grain in the oblast. [Excerpts] [Moscow SEL'SKAYA ZHIZN' in Russian 19 Jul 81 p 1] 11772

BROAD MANEUVER--Smfercpol'--The harvesting of winter barley is underway on the fields of the Crimea. Machine operators are applying the Ipatovo method everywhere and are extensively maneuvering technical equipment. A number of farms are successfully applying the shift method of harvesting. The essence of it is that two combine operators and two assistants work on each harvesting aggregate. They relieve each other every four hours. This kind of organization of labor makes it possible to harvest the grain for 20-22 hours a day. One of the first to introduce the

shift method in the Crimea was the Kolkhoz imeni XXI s"yezda KPSS in Krasnogvardeyskiy Ravon. [Excerpts] [Moscow SEL'SKAYA ZHIZN' in Russian 28 Jul 81 p 1] 11772

SPEEDY HARVEST--Kirovograd--Harvest time has come to the fields of the oblast. Machine operators of 656 harvest and transport complexes are operating the technical equipment. The scorching heat and dry winds have changed the time periods for the ripening of the grain and, within the boundaries of the oblast, north and south, east and west, are the same. The farms began to mow peas on the same day in Petrovskiy and Ol'shanskiy rayons, and in Ustincvskiy and Onutriyevskiy rayons. Here, as in other rayons, ripe winter crops are also being mowed and they are beginning to thresh the swathes of peas. Taking advantage of the days with good weather, the grain growers are striving to gather the crop as quickly as possible and not to allow the slightest losses. They have allotted 12-14 working days for the harvest everywhere. [Text] [Moscow SEL'SKAYA ZHIZN' in Russian 9 Jul 81 p 1] 11772

STATE GRAIN--Odessa--The grain harvest is already in progress in the southern rayons of the oblast. They are gathering mainly winter barley and peas, but in a day or two they will begin to harvest winter wheat. The farmers of the oblast have committed themselves to harvesting the spike crops in 12-14 days and selling the state no less than 1.5 million tons of grain. Contributing to the fulfillment of this commitment, grain is being sold by the farms of Kiliyskiy, Bolgradskiy, Ovidiopol'skiy and other rayons. [Text] [Moscow SEL'SKAYA ZHIZN' 30 Jun 81 p 1] 11772

RECEIVING POINT--Odessa--Grain from the new harvest continues to come into the elevators of the oblast. A considerable quantity of grain of strong and valuable wheat has been received. Of the 32,000 tons that were to be sold to the state, the farmers of Ovidiopol'skiy Rayon will include no less than 2,500 tons of strong wheat and 7,000 tons of valuable strains. This commitment is being successfully fulfilled. [Excerpts] [Moscow SEL'SKAYA ZHIZN' in Russian 11 Aug 81 p 1] 11772

BLACK SEA GRAIN--Odessa--The first hundreds of tons of grain from wheat of the new harvest has been delivered to elevators from the mechanized threshing floors of the Black Sea farms. More than a half million hectares have been planted in winter wheat in the oblast--almost one-third of the area planted in grain. It was planted at optimal times last autumn with first-class seeds and after the best predecessors. Most of the areas were planted in the high-quality strains Odesskaya-51 and Bezostaya-1. As the grain ripens, the machine operators have been doing control threshings. This had made it possible to adjust the aggregates ahead of time, depending on the productivity of the areas, and to avoid losses of the crop. All of the farms have formed operational control posts which evaluate the quality of the work of each combine crew. Control has been established for the fields from which the grain will go into the seed storehouses. The most experienced machine operators have been assigned to harvest them. The individual method is the main one that is being used. Farmers of the oblast have resolved to sell the state no less than 1.5 million tons of grain this year. Almost half of this quantity will be the main grain of the Black Sea steppe--winter wheat. [Text] [Moscow SEL'SKAYA ZHIZN' in Russian 5 Jul 81 p 1] 11772

UKRAINIAN GRAIN HARVEST--The grain and pulse crops have been mowed on 13.6 million hectares or 93 percent of the area in the republic. And 97 percent of the grain that has been mowed has also been threshed. The sale of grain to the state is

speeding up. The farms are rapidly preparing the soil for planting winter crops. A great deal of attention is being devoted to preparing seeds. The harvest of buckwheat and millet has started. Machine operators of the Carpathian area have brought the seeders out onto fields that have been cleared of after harvest residuals, plowed and well fertilized. Specialized detachments are planting rape--a valuable feed crop. They have resolved to complete the planting at optimal times. Last week the farms of the republic completed the planting of repeat and after harvest crops on a million hectares. Repeat plantings, which not so long ago were considered secondary, have become a reliable forage reserve for late autumn when the green mass no longer comes in from the main areas. The republic is counting on obtaining no less than 15 million tons of feed mass from the second harvest. [Text] [Moscow IZVESTIYA in Russian 14 Aug 81 p 1] 11772

CSO: 1824/420

AGRO-ECONOMICS AND ORGANIZATION

TEXT OF RSFSR RESOLUTION ON PRIVATE FARM PLOTS, MARCH 1981

Moscow SOBRANIYE POSTANOVLENIY PRAVITEL'STVA ROSSIYSKOY SOVETSKOY FEDERATIVNOY SOTSIALISTICHESKOY RESPUBLIKI in Russian No 10, 1981 pp 151-155

[Resolution of RSFSR Council of Ministers No 141, 13 March 1981, on Additional Measures for Increasing Production of Agricultural Products on Private Subsidiary Farms of Citizens of the RSFSR]

[Text] In implementing the decree of the CPSU Central Committee and the USSR Council of Ministers of 8 January 1981 No 27, the RSFSR Council of Ministers hereby resolves:

1. The council of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms, gorispolkoms, the RSFSR Gosplan, the RSFSR Ministry of Agriculture, the RSFSR Ministry of Procurements, the RSFSR Ministry of the Meat and Dairy Industry, the RSFSR Ministry of the Food Industry, the RSFSR Ministry of the Fruit and Vegetable Industry, the RSFSR Ministry of Trade, the RSFSR Central Statistical Administration, the RSFSR consumers union, and other ministries and departments of the RSFSR are to:

Comprehensively analyze the course of the fulfillment of the decree of the CPSU Central Committee and the USSR Council of Ministers of 14 September 1977 No 843 and the decree of the RSFSR Council of Ministers and the AUCCTU of 12 September 1977 No 623, and eliminate existing shortcomings in the matter of organizing private subsidiary farms of citizens, collective garden and orchard cultivation and procurement of agricultural products of the population;

Implement additional measures for improving the condition under which kolkhoz workers, other workers, employees and other citizens can keep private subsidiary farms and to increase the incentives of kolkhozes, sovkhozes and other agricultural enterprises and also consumers' cooperative organizations for fuller utilization of the capacities of the farms of the citizens for increasing the production and sales of products of farming and animal husbandry.

2. To draw the attention of the councils of ministers of autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms, gorispolkoms, economic agencies and managers of kolkhozes, sovkhozes and other agricultural enterprises, the RSFSR consumers union and its local organizations to the fact that, along with taking measures to improve the production of animal husbandry products on private subsidiary farms of citizens under agreements with kolkhozes, sovkhozes and other

agricultural enterprises, they are to provide for expansion of the procurement activity of consumers' cooperative organizations and the development of commission trade and trade at kolkhoz markets in meat and other agricultural products.

3. The councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms, gorispolkoms, the RSFSR Ministry of Agriculture and its local agencies, kolkhozes, sovkhozes and other agricultural enterprises are to provide for raising young livestock and poultry and selling it to the population in quantities that satisfy the demand for it on private subsidiary farms of citizens, taking into account the raising of livestock and poultry under agreements with kolkhozes, sovkhozes and other agricultural enterprises and with consumers cooperative organizations.

4. The councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms, the RSFSR Ministry of Agriculture, the RSFSR Ministry of Procurements and the RSFSR consumers union are to take additional measures for further development of rabbit raising on private subsidiary farms of citizens.

The councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms, gorispolkoms and the RSFSR Ministry of Agriculture are to provide for raising breeding rabbits on kolkhozes, sovkhozes and other agricultural enterprises in quantities necessary for satisfying the demand for them on private subsidiary farms of citizens.

5. It is incumbent on the councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms, gorispolkoms, the RSFSR Ministry of Agriculture and its local agencies, and the managers of kolkhozes, sovkhozes and other agricultural enterprises to take additional measures for improving the supply of feed for livestock and poultry on private subsidiary farms of citizens.

Kolkhoz workers, other workers, employees and other citizens who are conscientiously participating in public production and pensioners who maintain large horned cattle, sheep and goats on private subsidiary farms are to be given plots for haying and for grazing cattle for the longest possible period. Under the established policy, agricultural land of the kolkhozes and sovkhozes, land of the state supply and the state timber fund as well as of industrial, transport and other nonagricultural enterprises and organizations is to be used for these purposes. The kolkhozes, sovkhozes and other enterprises and organizations should render assistance to the citizens in increasing the productivity of land.

6. The RSFSR consumers union, the councils of ministers of the autonomous republics, the krayispolkoms and oblispolkoms are to provide for further improvement of the activity of consumers cooperative organizations in purchasing animal husbandry and farming products from private subsidiary farms of citizens at prices that are agreed upon, to work more actively for concluding agreements with citizens for the purchase of agricultural products, and to considerably expand cooperative trade in the products that are purchased. They are to take additional measures for strengthening the material and technical base of receiving and procurement points of consumer cooperation, and for constructing, reconstructing and expanding enterprises for processing and storing agricultural products that are procured as well as providing them with the necessary equipment, packaging and other supplies.

They are to set assignments for consumers cooperative organizations regarding the purchase of livestock and poultry, rabbits, meat and meat products from private subsidiary farms of kolkhoz workers, other workers, employees and other citizens.

The councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms and gorispolkoms are to:

Grant consumers cooperative organizations premises for carrying out cooperative trade and render the necessary assistance in allotting transportation for the shipment of agricultural products;

Take measures for expanding and strengthening the material base of the kolkhoz markets so as to create the necessary conditions for the citizens to sell their surplus agricultural products.

7. The RSFSR consumers union, the RSFSR Ministry of the Food Industry, the RSFSR Ministry of the Meat and Dairy Industry, the RSFSR Ministry of the Fruit and Vegetable Industry, the councils of ministers of the autonomous republics, the rayispolkoms and oblispolkoms are to set assignments for the enterprises under their jurisdiction concerning the creation in 1981-1983 of the necessary network of receiving and procurement points to provide for prompt receipt from the population and processing of livestock, poultry, milk, potatoes, vegetables, fruits, berries, and other products.

8. The RSFSR Gosplan, the RSFSR Ministry of Local Industry, the RSFSR Ministry of Housing and Municipal Services, the RSFSR Ministry of the Timber Industry, the RSFSR Ministry of Agriculture, the RSFSR Ministry of the Fuel Industry and the RSFSR Goskomsel'khoshtekhnika are to:

On the basis of orders from the RSFSR Ministry of Trade and the RSFSR consumers union, beginning in 1982, include in the drafts of the annual plans for the economic and social development of the RSFSR assignments for the production of garden and orchard supply and small technical equipment of the kinds and in the volumes that will satisfy the demand of the population for them;

Develop additional measures for increasing the production and sale to the population of garden and orchard supplies, containers, packing materials, and means of minor mechanization of agricultural work.

9. The councils of ministers of the autonomous republics and the ispolkoms of local soviets of peoples' deputies are to:

Consider requests of enterprises, organizations and institutions concerning the allotment of land plots for collective orchard and garden cultivation and take measures to grant these requests;

Provide under the established policy for granting enterprises, organizations and institutions land plots for collective orchard and garden cultivation from land in the state forest fund that is not covered by forest or is covered by less valuable forest plants in the green and suburban zones of cities and other population points, taking into account future expansion of the territory of the population

points and, as an exception, unutilized overlapping strips, small sections and less productive land of the kolkhozes, sovkhoses and other agricultural enterprises.

10. The councils of ministers of the autonomous republics, krayispolkoms and oblispolkoms are to provide for granting enterprises, organizations, institutions and citizens plots of land for temporary use from unutilized land of industrial, transportation and other nonagricultural enterprises and organizations and also from unutilized land within cities and other population points for the cultivation of potatoes and vegetables crops on these sections. These sections are to be granted to enterprises, organizations, institutions and citizens under the established policy for a time period during which these sections will not be used for their immediate purpose.

11. To make it incumbent upon the councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms and gorispolkoms to take additional measures for increasing the sale of brick, timber, stones, gravel, sand and other local construction materials to the rural population and amateur gardeners.

The councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, the RSFSR Gosstroy and the Roskolkhozstroy association are to make the planning organizations under their jurisdiction responsible for drawing up (developing) plans for the organization of the territories of collective gardens under agreements with boards of gardening societies both on the basis of application from the administrations and trade union committees of enterprises, institutions and organizations to which the land plots have been granted under the established policy and by decisions of rayons and city soviets of peoples' deputies.

Beginning in 1982, the RSFSR Gosplan is to assign to the councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms and the RSFSR Gosstroy limits on planning and research work for planning the organization of the territories of collective gardens.

12. The RSFSR Gosplan, the RSFSR Ministry of the Timber Industry, the RSFSR Ministry of Local Industry, the Roskolkhozstroy association, the RSFSR consumers union and the RSFSR Ministry of the River Fleet are to provide for increased production of prefabricated garden houses for gardening societies.

13. The RSFSR Ministry of Agriculture, the RSFSR Ministry of Finance, the RSFSR Ministry of Justice, the RSFSR consumers union and the all-Russian society of amateur rabbit and animal breeders are to consider before 1 October 1981 the question of organizing an all-Russian voluntary agricultural society for more efficient management of gardening and other societies and for rendering assistance to the population in keeping private subsidiary farms and, if necessary, submitting proposals to the RSFSR Council of Ministers.

14. The RSFSR Ministry of Housing and Municipal Services and the RSFSR Ministry of Agriculture are to consider and, with the agreement of the AUCCTU, within a month's time enter into the standard regulations for gardening societies of workers and employees additions that provide for granting the right to enter the gardening society to one of the heirs of a deceased member of this society.

15. The RSFSR Gosplan and the RSFSR Gosstroy, in conjunction with the RSFSR Ministry of Agriculture, is to determine, based on local peculiarities and the possibilities of the population for keeping private subsidiary farms, the maximum limit of area and the kinds of structures that are to be attached to residential buildings and, in the shortest possible period of time, submit to the USSR Gosplan and the USSR Gosstroy proposals concerning the structure and cost of housing construction in rural areas that is carried out on sovkhozes and other agricultural enterprises with state capital investments.

The councils of ministers of the autonomous republics, krayispolkoms, oblispolkoms, rayispolkoms and gorispolkoms are to permit the construction, on a cooperative basis in population points, of animal husbandry facilities for maintaining livestock that are the personal property of the citizens.

16. The RSFSR Ministry of Consumer Services and the RSFSR Goskomsel'khoshtekhnika in conjunction with the councils of ministers of the autonomous republics, krayispolkoms and oblispolkoms are to consider and resolve the problem of creating in the autonomous republics, krays and oblasts leasing points for agricultural supplies and the necessary technical equipment for rendering assistance to kolkhoz workers, other workers, employees and other citizens for private subsidiary farms and collective gardens and orchards.

17. The ministries and departments of the RSFSR, the councils of ministers of the autonomous republics, the ispolkoms of kray, oblast, rayon, city, rural and village soviets of peoples' deputies are to do the necessary organizational and explanatory work among the population and familiarize the kolkhoz workers, other workers, employees and other citizens with the measures envisioned by the decree of the CPSU Central Committee and the USSR Council of Ministers of 8 January 1981 for additionally increasing the production of agricultural products on private subsidiary farms of the citizens.

They are to jointly create a social climate whereby kolkhoz workers, other workers, employees and other citizens will feel that by raising livestock and poultry on private subsidiary farms and engaging in orchard and garden cultivation, they are doing useful state work.

M. Solomentsev, Chairman of the RSFSR Council of Ministers

I. Smirnov, Administrator of Affairs of the RSFSR Council of Ministers

11772

CSO: 1824/399

AGRO-ECONOMICS AND ORGANIZATION

PRIVATE PLOT CONCERNS REVIEWED

Complaint and Response

Moscow SEL'SKAYA GAZETA in Russian 27 Jun 81 p 2

[Complaint by A. Fiyas', driver at the Maloye Mozheykovo Sovkhoz in Lidskiy Rayon]

[Text] Last year the population of the Gostilovskiy Village Soviet, on the territory of which I live, sold 441 tons of milk and 63 tons of meat to the state. Are these amounts large or small? It is my opinion that the figures could be larger.

There are only 675 cows being maintained on the 1,072 yards belonging to the village soviet. Many families do not even maintain swine. I believe that there is no place in the rural areas for such dependence upon the work of others. You have a private plot and so you use the land in a thrifty manner and produce products.

Why is it that many rural workers do not maintain livestock? There are many reasons. Perhaps the principal one is the poor availability of feed. Although the privately owned livestock in my village of Gostilovskiy graze on tracts of perennial grass, the pasture problem in other populated points has yet to be solved. In the summer the cows graze on unsuitable land marked by poor vegetation. The milk yields are adversely affected by feed shortages and extended cattle drives. Moreover, the animals must be grouped in small herds owing to the small tracts of grazing land made available. And this means that the cows must be shifted from one grazing area to another rather frequently, thus distracting the rural workers from public production.

The haying lands are made available for private use on a very tardy basis. The grass becomes overripe and low quality hay is obtained. Last year the land was made available during the period of autumn rainfall and a considerable portion of the feed rotted. As a result, the people had to dispose of their livestock. Whereas earlier, my father-in-law and I both maintained a cow, now we have only one remaining. Nevertheless, last year we sold more than 3 tons of milk to the state. We also sold two swine.

Small family farms have made a great contribution to the overall task. Included among the active suppliers of milk are -- Andrey Pisarenko, Sov'ya Shashko, Petr Lupsyakov, Nadezhda Shashko and other fellow countrymen.

Experience accumulated over a period of many years reveals that each rural plot is capable of producing surplus products provided the work is organized in the proper manner. Many residents do not maintain livestock not because they do not wish to burden themselves with excessive problems, but rather because they are not sure that they will be able to maintain them. For example, let us take pensioners. It would seem that they could at least breed poultry. But some of them are not capable of handling a scythe out on the meadows. Thus equipment would have to be provided in order to procure hay. Concern must be displayed with regard to the selection of permanent shepherds. And this can be done only if normal pastures are available.

My fellow villagers have welcomed as both correct and timely the recent decree of the CC CPSU and the USSR Council of Ministers entitled "Additional Measures for Increasing the Production of Agricultural Products on the Private Plots of Citizens." It will undoubtedly exert great influence with regard to increasing the procurements of milk, meat and other agricultural products.

Response To Above Complaint

What is being done to correct the shortcomings which disturb driver A. Fiyas' and his fellow villagers at the Maloye Mozheykovo Sovkhoz? The Editorial Board asked the chairman of the Executive Committee of the Gostilovskiy Village Soviet to discuss this problem. She stated:

Prior to outlining and approving the measures of the Executive Committee with regard to carrying out the decree of the CC CPSU and the USSR Council of Ministers entitled "Additional Measures for Increasing the Production of Agricultural Products on the Private Plots of Citizens," the decree was discussed at gatherings held in all of the populated points. We decided to conduct a thorough study of the mistakes and shortcomings in this work, so as to be able to correct them in a more efficient manner.

Truly, very little attention has been given at the Maloye Mozheykovo Sovkhoz to creating pastures or to making haying lands available for privately owned cows. Many complaints have also been registered in the villages of Mosevichi, Alimpinovo and Dmitrovtsy, where the grazing situation is very bad.

The Executive Committee has informed the management of the sovkhov and, in particular, its director G.I. Sergeyev, concerning the results of the work carried out. Together they gave thought to what can and must be done and they outlined specific measures which were approved by the Executive Committee.

At the present time, at those populated points where cows of the sovkhov's workers graze during the summer on unsuitable lands, continuously cultivated pastures are being made available at the rate of 0.25 hectares per head. And in order for the people to be able to raise forage grain on their private plots, they are being supplied with 2 tons of grain crop seed.

Thought was given to increasing the number of livestock in the private sector. The sovkhov will sell 200 non-calving young cows and 100 young pigs to the population.

In order to strengthen the feed base on the private plots, the plans call for the sale of 50 tons of grain to the population from this year's harvest. Each individual who maintains a cow and participates actively in public labor will be provided with 0.15 hectares of haying land this year and not on a one-time basis but rather for extended use.

The advantage offered by such an approach is obvious. An individual will be able to organize the tending of his plot and obtain two cuttings from it. Each will be able to procure his feed at a time convenient for him and in so doing he will not be detracting from the fulfillment of his principal obligations.

Thus the measures outlined by the Executive Committee of the Village Soviet, jointly with the Board of Directors of the sovkhoz, will make it possible to achieve considerable growth in the production of agricultural products on the private plots of citizens and in the sale of such products to the state.

Official Support Offered

Moscow SEL'SKAYA GAZETA in Russian 11 Jul 81 p 1

[Article: "Private Plots -- Of General Concern"]

[Text] The Council of Ministers of the BSSR has examined the problem concerning the work of the executive committees of the soviets of peoples' deputies in Minskaya Oblast, with regard to carrying out the decree of the CC CPSU and USSR Council of Ministers dated 8 January 1981 and entitled "Additional Measures for Increasing the Production of Agricultural Products on the Private Plots of Citizens."

The Minskaya Oblast Executive Committee has recommended the introduction into operations on an extensive scale of the experience accumulated by leading farms throughout the oblast, republic and country, in connection with improving the operating conditions for the private plots of citizens, employing mechanized cultivation of the private plots, procuring feed and rendering other services to the population which will promote a maximum reduction in manual labor during the production of agricultural products. In small cities and settlements, unused tracts of land should be singled out and made available to the residents for use as gardens. Rental points for agricultural implements and appropriate items of equipment must be organized.

The Oblast Executive Committee and the Rayon Executive Committee, jointly with the organizations of consumer cooperation, are tasked with improving procurement operations in the various areas, expanding the network of procurement points, strengthening their logistical base and also ensuring the unconditional fulfillment of those tasks associated with the procurements of agricultural products and improving the supply of food goods for the population.

Overview of Letters

Moscow SEL'SKAYA ZHIZN' in Russian 5 Aug 81 p 4

[Article by G. Beresneva: "Concern for the Peasant Farmsteads"]

[Text] Reliable and strong contacts exist between the local procurement organizations and the owners of private plots at the Kolos Kolkhoz in Tikhoretskiy Rayon. For example, owners such as D.I. Nemykin are selling 3,000 kilograms of milk to the state annually. An honored kolkhoz member, N.Z. Greshayev, in a letter sent to SEL'SKAYA ZHIZN', discusses how his fellow countrymen are carrying out animal husbandry operations on their private plots.

The Editorial Board is constantly receiving letters concerning this theme. The great amount of attention that is being given at the present time to the problems of the private plots is prompting individuals to share their thoughts on this subject with the newspaper in a more active manner than has been the case in the past.

These letters contain many reports regarding the sale of surplus products produced on the peasant farmsteads. For example, T.F. Gudim in Starokonstantinovskiy Rayon in Khmel'nitskaya Oblast raised and sold through a kolkhoz two young bulls each weighing 350 kilograms. Surplus products are being sold by V.N. Ponomarenko, M.V. Sidorenko, N.P. Kol'maga and others in Issyk-Kul'skiy Rayon in the KiSSR.

These facts are very gratifying. They indicate that in those villages where normal conditions have been created for the maintenance of private plots, the rural residents are not only able to supply their families with fresh products but in addition they are also able to augment the state's food resources. Unfortunately, this is not the situation in all areas. We are also receiving letters informing us of the difficulties being encountered in the management of the private plots.

The chief unsolved problem involves failure to supply the peasant farmsteads with the feed required. It was distressing to read the following lines: "In 1979, a promise was made that 1 ton of straw would be supplied to each of us workers at the Prigorodnyy Sovkhoz in Medvedevskiy Rayon in the Mariyskaya ASSR and yet we received only one half this amount. Last year, we did not receive 1 gram whatsoever and this was at a time when several dozens of hectares of grass were covered over by snow."

A similar letter sounding an alarm was received from V.V. Ivlev and A.P. Tat'vanik (37 signatures in all) of the Krasnyy Kolos Sovkhoz in Lipetskiy Rayon in Lipetskaya Oblast. Very little forage is being supplied there and grazing areas generally are not being made available. "The only area available for use as a pasture was a ravine and this was placed at the disposal of four farms. Only sand and asphalt remained for the grazing of our livestock."

Similar letters tend to indicate that some farm leaders continue to remain oblivious of their direct responsibilities, the importance of which has been emphasized more than once in party and governmental decrees: in their production-financial plans, to include measures aimed at ensuring that feed is provided not only for public animal husbandry but also for the livestock being maintained on a private basis by kolkhoz members, sovkhoz workers and other citizens. We can only agree with the opinion expressed by D.G. Zaytsev in Kotel'nichskiy Rayon in Kirovskaya Oblast, who believes that those fail to carry out this requirement should be dealt with in a very strict manner.

A large portion of the concentrated feed is being made available for sale through the cooperative trade. What is the best method for organizing such sales in the interest of eliminating abuses and disorganization? "I would propose" wrote V.A. Pis'menkov from Rakityanskiy Rayon in Belgorodskaya Oblast "that the feed be sold on the basis of farmstead notebooks, as is the case, for example, with coal. The settlement soviets could monitor the norms for feed sales in conformity with the requirements of each private plot. This system would ensure a more uniform distribution for the feed and it would reduce the use of grain for feeding to the livestock.

Agronomist N.K. Koshkin in Kirovskaya Oblast is also disturbed by the feed problem. He advocates the raising of one very productive and valuable perennial forage crop on the private plots -- alfalfa. Some peasants have for a long period of time been cultivating this crop around their homes. For example, kolkhoz member A.V. Kartashov in the village of Petryayevo in this same Kirovskaya Oblast has been obtaining three cuttings of alfalfa annually from .04 hectares. A requirement exists for merely ensuring that the stores of the Sortsemovoshch system make seed available for all those desiring to raise this high protein crop.

There is still another vital problem, one mentioned frequently in the mail being received from readers, that is closely linked to the need for making feed available for private animal husbandry -- the mechanization of labor on the peasant farmsteads. Unfortunately, it is practically impossible to find, available for sale, a mechanized mower or scooter with a package carrier. This has been the subject of letters received from I.I. Kochegura in Krasnodarskiy Kray, P.N. Bannov in Penzenskaya Oblast and many others.

Yes, the equipment is there. At times, problems in the production of simple items of everyday use create additional difficulties in the management of private plots. V.I. Shmelev, in the village of Svecha in Moscow Oblast, writes concerning the incompatibility of cast iron ovens... the size of the portable iron stoves in which the feed is steamed and the water for the livestock heated. Earlier, such stoves had two "holes" with a set of jugs of various sizes, such that it was possible to use all types of cast iron. However, it appears that today, for one reason or other, they have overlooked this convenience.

But let us assume that the fattening of a young pig or young bull has been completed. A rural resident has decided to sell them. But to whom and how? Here there is also a problem. M.F. Polovinkin of the village of Burla in Altayskiy Kray reports that 1 year ago there were 700 head of long-horned cattle at the Burlinskiy Sovkhoz which perished. Nobody was seriously held to account for this. The sovkhoz augmented its herd through livestock procurements from the population. Although the plan for selling meat and animals was fulfilled, the state realizes very few advantages from such a combination of circumstances. Procurements of animal husbandry products obtained in the private sector must at no time be used to cover mistakes made in public production.

Administrative pressure cannot be tolerated in the case of such procurements. B.D. Trusov in the village of Zholnino in Dzerzhinskiy Rayon of Gor'kovskaya Oblast relates how the chairman of the settlement soviet, G.F. Isakov, after acquainting the residents with the milk procurement plan, made the availability of

haymaking land dependent upon the fulfillment of this plan. M.P. Savokhin of Voznesen'ye Settlement in Leningrad Oblast writes of similar pressure. And this took place under conditions wherein the milk receiving station was located at some distance and the farmstead circuit had not been organized. Judging by letters received from readers, it would appear that the procurement of agricultural products is poorly organized in the city of Dankov in Lipetskaya Oblast, in the village of Berezovka in Shushenskiy Rayon of Krasnoyarskiy Kray and in the village of Malo-Priyutnoye in Kurganskaya Oblast.

The range of problems raised by the readers of SEL'SKAYA ZHIZN' is very diverse and extensive. Many of them are of the belief that more literature should be published on the maintenance of private plots and that lectures, discussions and consultations by specialists should be conducted on this subject. The peasant farmsteads should be provided with better support in the form of young animal and poultry stock and seed. The standard of living of rural families is greatly dependent upon solutions being found for these problems. And this is why attention must constantly be focused upon them.

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CSO: 1824/428

AGRO-ECONOMICS AND ORGANIZATION

PRIVATE PLOTS, SUBSIDIARY FARMS SUPPLY MEAT TO COOPERATIVES

Moscow SEL'SKAYA ZHIZN' in Russian 10 Jul 81 p 2

[Article by M. Morozov and V. Krinitskiy, Kazakh SSR: "Meat Department for Cooperation Specialists"]

[Text] A brisk trade in agricultural products is taking place at the markets in Alma-Ata. There are always many customers at the stalls where mutton, beef, pork and poultry are sold. More than one half of the meat lines are occupied by salesmen for consumer cooperation. On the advertisement panels for each line, one reads: Talgarskiy, Dzhambulskiy, Iliyskiy, Kaskelenskiy, Enbekshikazakhskiy and Kurtinskiy raypotrebsoyuzy [rayon union of consumers' societies] and Alma-Atinskiy Gorkooptorg [City Cooperative Trade Organization]. The prices are shown. The meat deliveries are increasing from day to day. The Kooperator stores are extremely popular among the Alma-Ata residents. They are located in the center of the city and they always offer a broad selection of products.

In Kazakhstan, the commission trade in agricultural products is carried out by 49 cooperative trades having company stores in the oblast centers, industrial cities and worker settlements. In the carrying out of this work, a great role was played by the cooperation specialists who organized the procurement of products from the population directly on the peasant plots. Last year, more than 160,000 contracts were concluded between the cooperation specialists and the owners of private plots. These contracts resulted in the procurement of 36,000 tons of meat. A new contractual campaign is underway at the present time. These contracts are no longer being signed for 1 year, as was earlier the case, but rather for 2-3 years. This year the republic's cooperation specialists plan to procure from the population, in accordance with the prices agreed upon, up to 53,000 tons of meat in dressed weight -- one and a half times more than the figure for last year. And next year this figure will be increased to 75,000 tons. In all, the plans call for up to 338,000 tons of meat to be procured from the population during the five-year plan, compared to only 125,000 tons during the Tenth Five-Year Plan.

In the arsenal of the cooperation specialists there are many resources available for stimulating the development of private plots among rural workers. The procurement specialists have been authorized to provide those citizens with whom contracts have been concluded a monetary advance amounting to 50 percent of the total amount of the contract and in the case of field crop husbandry products -- up

to 30 percent. The livestock are being accepted at the place of residence of the suppliers. The system of maintaining accounts in savings banks is being introduced on an extensive scale.

The rolls of the Talgar Municipal Consumer Society list 252 constant suppliers, all of whom reside in the rayon center or in villages throughout the rayon. Last year, in addition to products from the private gardens and orchards, 450 tons of meat were obtained from them. This year, contracts have already been concluded for 480 tons. By way of an incentive for stimulating growth in the procurement of animal husbandry products, the administration of the Gorpo [Municipal Consumers' Society] is utilizing the method of guaranteed sales for goods that are in high demand. In particular, this point has been included in the contract. For example, K. Sarmanov of the Kolkhoz imeni Ryskulov and K. Aliyev of the Alma-Ata Kolkhoz, during the course of concluding their contracts, vowed to supply 1,450 and 1,000 kilograms of meat respectively and to purchase rugs with the money earned. The cooperation specialists delivered the goods to their homes.

"We have enlarged this system of contacts and accounts to include other categories of suppliers" stated the chairman of the gorpo administration A.A. Gorgopko, "All consider it to be suitable and profitable. Especially the amateur beekeepers. As a rule, these are elderly people who are enjoying a well earned rest and who maintain apiaries not so much as a means for supplementing their family budget but rather as a healthy occupation. They prefer not to deal with a market and willingly participate in cooperation. In turn, we make every attempt to satisfy their needs. With money earned from the sale of honey, V.I. Kerlyuk wished to purchase a suite of furniture and M.F. Kochetov ordered some carpeting. Both orders were carried out."

The Talgar Gorpo has accepted responsibility for organizing public catering services at schools, institutions and technical schools, pre-school institutes and hospitals in the rayon center and to supply the snack bars and dining halls with meat dishes and sausage items on a continuous basis.

Certainly, it is by no means easy to cope with this task in the rayon center where tens of thousands of individuals reside. Here the procurement of surplus products from the population will not be enough. Thus the Talgar cooperation specialists are developing their own meat production operations. Since 1968, they have operated a swine farm where 800 animals can undergo fattening simultaneously. Last year, this farm supplied 80 tons of meat in dressed weight. The production cost per kilogram of pork did not exceed 1 ruble and 36 kopecks. Moreover, it bears mentioning that 86.5 of all of the meat produced was obtained based upon the use of food remnants.

The Gorpo has commenced the construction of a pitsty which is expected to provide no less than 400 tons of meat annually, pigsties of the camp type are being erected and the construction of poultry yards is being planned. They will supply 300 tons of meat annually. The Gorpo is organizing its own feed base and for this purpose the rayispolkom [rayon executive committee] is making available 200 hectares of land.

A fine mechanized swine farm was built at the beginning of this year by the Talgarskiy Raypotrebsoyuz. More than 1,000 animals, mainly locally produced young stock, will be fattened here annually. The fattening work will be carried out using mainly food remnants.

A decision was recently handed down in the republic concerning additional measures for increasing meat production and the procurements of animal husbandry products by consumer cooperation. The plans call for the creation, over a period of 2 years and within the organizations of consumer cooperation, of 172 subsidiary rural farms and 386 points for the fattening of livestock and poultry. A special agricultural production administration has been created within Kazpotrebsoyuz [Kazakh SSR Union of Consumers' Societies] and within the oblpotrebsoyuz's [oblast union of consumers' societies] -- its departments. For the construction of the subsidiary farms, for land reclamation work and for the procurement and fattening of livestock, the cooperative societies are being provided with Gosbank credits, construction materials, equipment, motor vehicles and other items of equipment. This construction work is attracting the participation of contractual organizations and detachments of students.

The subsidiary farms are being created taking into account specialization and in conformity with the specific local conditions. Some of these farms will concern themselves with the maturing and fattening of large-horned cattle, others with sheep and still a third group with swine and poultry. In short, different combinations are possible and yet each of the subsidiary farms will annually supply from 150 to 300 tons of products.

The maturing and fattening of livestock is a new branch of consumer cooperation. However, 13 cooperative farms and 157 points are already carrying out this work throughout the republic. The Alma-Atinskaya, Dzhabul'skaya, Chimkent'skaya, Taldy-Kurgan'skaya, Semipalatinskaya, Karagandinskaya Oblast unions of consumers' societies have built large-scale animal husbandry farms with feed preparation shops.

Such a farm is in its third year of operation for the Enbekshi Village Consumers' Society in Dzhabul'skaya Oblast. It has a cow barn for 200 head, a sheep pen for 900, a poultry house for 6,000 chickens and turkeys, a feed preparation shop, a storehouse and a weighing economy. Up to 65 tons of meat are being produced here annually and 33.5 tons of weight increase are being obtained from fattening operations. The production cost per quintal of weight increase is 125 rubles. Last year, 13,300 rubles of profit were realized from the sale of meat.

The Sayramskiy Rayon Union of Consumers' Societies in Chimkent'skaya Oblast built a mechanized fattening base for 200 head of large-horned cattle, a farm for the same number of swine and also a shed for the holding over of 100 cows and horses. Here there is also a poultry farm and a cattle slaughtering point. The preparation and issuing of feed and also the watering system have been mechanized. The cooperation specialists have already removed 900 head of large-horned cattle and horses from the fattening regime, as well as 300 swine, and they have raised approximately 10,000 chickens. A portion of the meat obtained from procurement operations and fattening is being sold to the population and the other portion is being processed: at the procurement office there is a shop which produces sausage items, hams and other products. The public catering enterprises have organized the production of semifinished meat products.

The raising of rabbits has become an important meat reserve. A republic society for amateur rabbit breeders has been created in Kazakhstan. It brings together 77 rayon and municipal and 13 oblast branches and it has a total membership of 7,200.

However, the creation of societies represents only one half of the problem. Equally important is the need for organizing their operations properly. It is here that everything as yet is not proceeding smoothly. From Chardarinskiy Rayon, the specialized farms of which provide their own feed, and from many other rayons in Chimkentskaya Oblast, signals are being received indicating that the amateur rabbit breeders in these areas are not only not able to purchase feed for their rabbits in a timely manner, but in addition they are unable to persuade the procurement specialists to accept the animals that are raised. Difficulties also exist in connection with the sale of products in other areas.

Although these are singular incidents, they are nevertheless alarming. Thus, by no means is full use being made of the available reserves. Thus, the meat department of the cooperation specialists can still become more productive.

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AGRO-ECONOMICS AND ORGANIZATION

ORGANIZATIONAL AID PROVIDED FOR PRIVATE PLOT POULTRY RAISING

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 14 Jul 81 p 2

/Article by V. Gvardzhaladze, manager of the Georgian Administration of the Poultry Breeding Industry, Tbilisi: "The Domestic Farm Helps the Factory"

/Text It is convenient and profitable to develop private subsidiary plots in small settlements and rayon centers. Let us take Tetritskaroyskiy Rayon. Basically, it is an agricultural rayon. However, it has a canning plant, an affiliate of a tool plant and local industry enterprises. Almost everyone that works at these enterprises has a private plot. Many try to establish domestic subsidiary plots, to grow vegetables and to raise livestock and poultry. However, it is not easy to do this alone. Livestock barns and fodder are needed. Surplus products must be sold somewhere. Not everyone will agree to stand with them at the market.

Therefore, the Georgian Administration of the Poultry Breeding Industry, having studied the labor reserves, along with the further development of industrial poultry breeding began to practise cooperation between public farms and the population. Despite the short period that elapsed from the time of conclusion of the first contracts, on this basis the republic's poultry factories, in addition, obtained about 100 tons of primarily first-grade poultry meat. The income of the citizens themselves also increased considerably.

In order to make this process controllable and to eliminate "variant readings" in the localities, we developed a special statute on poultry raising on the basis of cooperation with the population and a form of contract concluded between poultry factories and owners of private subsidiary plots. These documents clearly stipulate the duties of both parties. Here is an example.

The Kodiyskaya Broiler Factory, having concluded a contract with T. Tsulukidze, accountant of the rayon union of consumer societies, transferred 1,000 1-day old chicks of meat specialization to her for raising. For the production of 1 kg (in live weight) of delivered meat the poultry factory allocated 3 kg of mixed feed free of charge. T. Tsulukidze, whose husband and two school-age children helped her in the care of poultry, in 2 months delivered, according to the contract, 700 kg of poultry meat. For this she was paid 700 rubles. Furthermore, 247 2-month old chicks out of those she raised were given to her in the form of payment in kind.

From the very beginning of the experiment it became clear that a great deal depends on the organization of work, which should help people to avoid unnecessary trouble. Therefore, every poultry factory undertakes the obligation to deliver 1-day old chicks and fodder with its own transport facilities free of charge to homes. The enterprise representative accepts the live poultry directly on the private subsidiary plot. All this attracts people. The first successes are beginning to show. For example, not long ago the Gamardzhvebskaya Poultry Factory transferred more than 80,000 1-day old chicks to 73 families for raising and 100 families are on a waiting list.

I remember how many skeptics there were when we took the first steps along the path of cooperation with the population. They said that under the conditions of dispersion of subsidiary plots, in practice, it would be impossible to solve many problems connected with the care of poultry, in particular, to ensure the necessary zooveterinary services.

Of course, when it is a question of poultry breeding, the danger of spread of infection must not be minimized. It would seem, however, that an efficient and thought-out organization of work will help to solve many problems. We began to hold courses providing minimum knowledge in zoology. Only after taking such a course can a person receive chicks for raising. Every poultry factory especially appoints an animal specialist and a veterinarian, who strictly control the fulfillment of the regime of veterinary instructions on private subsidiary plots, visit the localities regularly and provide practical aid in the care of poultry. On the basis of an agreement the republic's veterinary service disinfects and vaccinates poultry free of charge on subsidiary plots. It is not accidental that the situation is quite satisfactory on most domestic plots. The weight gain of poultry is within the norms stipulated by contracts and the preservation of the stock is quite high. For example, pensioner T. Metreveli from the village of Asureti was able to preserve 488 out of 500 1-day old chicks and in 60 days the weight gain of every chick was 1,170 grams.

Of course, it is difficult to keep a large number of chicks in a haphazardly adapted coop. Special cages, feeders and waterers are needed. Our poultry factories transfer old written off equipment free of charge to private subsidiary plots, but it seems that this is not the way out of the situation. One cannot do without the industry's assistance. The first step has already been taken. The Tbilisi Elektroapparat Production Association together with the specialists of the Georgian Administration of the Poultry Breeding Industry and of the Georgian Zooveterinary Institute developed and organized the output of cages for domestic farms. They are made from production waste. This work is profitable for the enterprise. Now we have established contacts with Georgia's Ministry of Local Industry and with a number of industrial enterprises of Union and republic subordination for the purpose of expanding the output of such equipment.

Cooperation with the population is a new thing for us. The mechanism of work is adjusted in practice and difficult problems are solved. For example, we believe that it is more advisable to sell fodder for chicks in specialized stores. Therefore, we went to the republic's Ministry of Procurement with the proposal to organize the output of mixed feed in a 10-kg package convenient for subsidiary plots.

Or the following problem. In order to fully meet the increased demand for 1-day old chicks, a large number of incubated broiler eggs are needed. As yet there is a shortage of them. In order to eliminate this gap between production and consumption, some poultry farms changed their specialization. Provision was made for an accelerated construction of the zone of the parent flock of the Kaspi Broiler Factory for 160,000 laying hens. This will make it possible to transfer up to 3 million 1-day old chicks to private subsidiary plots.

The decree of the CPSU Central Committee and the USSR Council of Ministers "On Additional Measures To Increase the Production of Agricultural Products on the Private Subsidiary Plots of Citizens" opens up wide possibilities for an increase in output. We set ourselves the task of producing up to 3,000 additional tons of high-quality poultry meat on the basis of cooperation with the population during the 11th Five-Year Plan. The first steps in this experiment show that this important problem will be solved.

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AGRO-ECONOMICS AND ORGANIZATION

UZBEK GRAIN CORN CROP PROGRESS OUTLINED

Moscow SEL'SKAYA ZHIZN' in Russian 6 Aug 81 p 1

[Article by Editorial Board of republic newspaper KOMSOMOLETS UZBEKISTANA: "Generous Ears"]

[Text] The farms in the southernmost oblast, Surkhandar'inskaya Oblast, are usually the first to commence the harvesting of corn in Uzbekistan. This year the tempo of the work being performed by the harvesting-transport detachments in Gagarinskiy, Dzharkurganskiy, Kumkurganskiy and Leninyul'skiy Rayons increased rapidly. During the very first week, all farms in the valley joined in the busy harvest campaign. Immediately thereafter the machine operators in Kashkadar'inskaya and Bukharskaya Oblasts commenced their harvest operations. Corn was harvested from hundreds of hectares in the Fergana Valley. The harvesting work is increasing in tempo. In just a few days, all of the republic's farms will be busily engaged in the mass harvesting of grain corn.

Already there is somebody to compete against. During a period of 5 days, the machine operators in Leninyul'skiy Rayon harvested 1,550 hectares. The cropping power -- 100 quintals per hectare.

This year, 40,000 more hectares were set aside for grain corn than was the case last year in Uzbekistan and on the whole the crop is being grown on 220,000 hectares. Use is being made of 1,500 harvesting-transport detachments of kolkhozes and sovkhoses, together with approximately 8,000 combines and the necessary transport equipment. On many fields, soil tilling and sowing units are being placed in operation immediately following the departure of the harvesting equipment. They are carrying out a secondary sowing of corn for silage. On a majority of the farms the combine pool is being employed in two shifts and the idle time of the equipment has been reduced to a minimum. The procurement points, of which there is presently a greater number, are in a complete state of readiness. An increase has taken place in the number of highly productive corn thrashers.

In the early 1970's, before the Uzbekistan Komsomol began furnishing support for the corn crop, the return realized from a hectare barely amounted to 20 quintals of grain. Manual harvesting work continued right up until late autumn. Life itself indicated that specialization was required for corn production operations. The republic's Komsomol undertook to solve this task. The young farmers were inspired by the fatherly advice offered by L.I. Brezhnev. "Corn can become a strong reserve

for increasing the production of grain when grown by your young hands under irrigated farming conditions" he emphasized in his welcoming speech to the first gathering of Uzbekistan young corn growers.

At the present time, this very important crop is being grown by 2,640 komsomol-youth groups. The sowings of corn have been increased by a factor of six and the gross yields of grain -- by a factor of more than 13. The task of the Tenth Five-Year Plan was surpassed by almost twofold and the average annual yield exceeded 1 million tons of grain.

The republic's komsomol committees are carrying out a tremendous volume of work. They are relying heavily upon the proper selection of personnel. The candidates for brigade leaders are approved by the bureaus of the komsomol rayon or oblast committees. This raises the responsibility for the assigned tasks.

A great amount of attention was focused on the socialist competition. It is being carried out by stages in conformity with the four principal cycles of agrotechnical measures -- soil preparation, sowing, tending the crops and the harvesting work. In striving to achieve high yields, an important role is played by the schools for leading experience. There are presently 12 such schools in operation throughout the republic. In Uzbekistan, the names of certain renowned brigade leaders of corn growing groups are mentioned with pride: Kumri Khasanova in Bukharskaya, Nuritdina Aismailova in Syrdar'inskaya, Olmakhon Akhmedova in Ferganskaya Oblast and other experts, all of whom obtained 110-130 quintals of grain per hectare. Last year there were 170 komsomol brigades which surpassed the 100 quintal level.

High results are being achieved by the corn growers in Samarkandskaya Oblast. In 1980, 89 quintals of grain were obtained here from each of 20,000 hectares. The oblast's young farmers exchanged experience during monthly seminars. During a recent seminar, a discussion took place on the initiative displayed by the brigade headed by Orzi Azimov, which is growing corn together with alfalfa. The essence of this innovation is as follows. In view of the fact that the simultaneous sowing of crops is reflected in the grain yield obtained, they are sown separately: first the corn and during its last cultivation -- the alfalfa. This enables the brigade to realize an annual savings of approximately 2,546 rubles. Last year the group obtained 102 quintals of grain corn, 400 tons of fodder and 50-60 quintals of alfalfa from each of 136 hectares. The advantage offered by this method is quite obvious.

When employed intelligently, the corn fields can serve as generous suppliers of feed. The hot sun of Uzbekistan makes it possible to grow "multiple-stage" crops (corn with beets or alfalfa) and to carry out secondary or intermediate sowings. For the Eleventh Five-Year Plan, the republic is calling for a considerable expansion in the sowings of grain corn. In addition, the task is being assigned of increasing the return from each irrigated hectare.

The Uzbekistan Komsomol has accumulated rich experience during the course of achieving new limits. An increase has taken place in the number of highly skilled experts at achieving high yields. However, the difficulties associated with the industrial technology for cultivation and harvesting operations have still not been overcome.

True, an important step was taken during this current season aimed at mastering this technology. The fields were enlarged and cost accounting sections and brigades were created, with tracts of 300-500 or more hectares assigned to them. Naturally, there will be an increase in the equipment requirements. For example, the Khersonets-7 combine is being used for the harvesting work despite the fact that it is not well suited for the conditions found in the southern zone. Indeed, the local irrigated lands are producing tall and generous crops. The plants have heavy ears and a large amount of fodder, which right up until the harvest does not droop and which is used for silage. The Khersonets-7 combine is not capable of harvesting such rich crops without losses.

This year a small number of the new Khersonets-200 machines have made an appearance on the republic's fields. But this combine was developed for an inter-row spacing of 70 centimeters and in Uzbekistan roughly one half of the grain corn sowings are based upon the 90 centimeter plan. Recently, based upon an order issued by the republic, the long-awaited model for a four-row combine, for wide inter-row spacings, was produced at the Kherson Combine Plant. Today, further improvements in the efficiency of the branch are dependent upon how rapidly this machine can be assigned to mass production.

During this first year of the Eleventh Five-Year Plan, the young farmers of Uzbekistan are competing to obtain no less than 1.35 million tons of grain corn. Increased emphasis is being given to obtaining a yields of 80-100 quintals per hectare, making a worthy contribution towards further strengthening the feed base and increasing the production of animal husbandry products.

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AGRO-ECONOMICS AND ORGANIZATION

SUBSIDIARY FARM DIFFICULTIES DISCUSSED

Response To Criticism

Moscow SEL'SKAYA ZHIZN' in Russian 11 Aug 81 p 2

[Editorial response to item published in JPRS 78356/1285 p 18: "Room for Initiative"]

[Text] In the 24 May 1981 issue of our newspaper, a report was published on the development of subsidiary farms of enterprises in Kirovskaya Oblast under the headline "Room for Initiative."

The secretary of the oblast CPSU committee, K. Vorob'yev, has informed the editorial board that the problems raised in the article are both correct and timely. Truly, in addition to those enterprises which are making extensive use of subsidiary farms for improving public catering and the supply of agricultural products for their collectives, the leaders of a number of enterprises are failing to display initiative and instead are relying upon the use of state funds. The oblast party committee, taking this fact into account, developed measures aimed at more extensive development of the subsidiary farms in order to increase the production of food products. However, the farms must be supplied with agricultural equipment, fertilizers and toxic chemicals on a planned basis.

According to the Deputy Chairman of the Kirovskaya Oblast Executive Committee, P. Yakubenko, the oblast organizations are constantly monitoring the selection and allotment of tracts of land and the creation of new subsidiary farms by enterprises and organizations. In particular, 10,900 hectares of land were allotted to 12 enterprises last year for the purpose of organizing new subsidiary farms. A number of farms are still engaged in working out their organizational problems.

Since the subsidiary farms call for the introduction of all-round mechanization of labor-consuming processes, the land tracts being made available are large in size and it is impossible to find such large tracts in the vicinity of the city of Kirov. Taking into account the conditions found in Kirovskaya Oblast, it is economically feasible to organize the subsidiary farms on insufficiently utilized agricultural lands located on the order of 70-80 kilometers from the oblast center.

In the responses received from the ministries: heavy and transport machine building, chemical industry and light industry of the USSR, mention is made of the

fact that they are undertaking measures aimed at improving the work of the subsidiary enterprises, expanding them and converting them over to modern technologies. In this manner they hope to achieve a considerable increase, during the Eleventh Five-Year Plan, in the production of agricultural products, which can then be made available to the collectives of their enterprises.

Feed, Administrative Problems Aired

Moscow EKONOMICHESKAYA GAZETA in Russian No 17, Apr 81 p 15

[Article by O. Artynskiy, Penza: "Only the First Step"]

[Text] The complex at Ukhtinka Settlement, near Penza, is just slightly more than 1 year old. It is a modern enterprise for the simultaneous fattening of 28,000 swine. All of the principal operations associated with tending the animals have been mechanized and automated.

The director of the complex, G. Robustov, who was formerly the head of a department at a similar swine fattening factory, albeit three times larger -- the leading enterprise of the Pankratovskiy Association for Pork Production, -- noted that the workers of Giprosel'khosstroy, in developing the plan for the new complex, had taken into account the wishes of the operations personnel: better facilities for the animals, front for feeding and so forth.

However, despite the technical advantages it possesses compared to related enterprises, the complex at Ukhtinka is not known for its efficiency: the weight increases for the animals are only 350 grams daily and at a neighboring unit in Pankratova -- 500 grams. Moreover, the production costs are high.

The complex is a subsidiary farm of the oblast's public catering administration. All of the city's large plants, factories and associations participated in its construction. The administration's workers took out a loan from Gosbank for a period of 6 years and they used this money to pay off not only the general contractor but also the industrial enterprises which supplied the material resources for the construction.

Although it seemed as though everything was proceeding well, problems arose which the complex's workers were unable to solve by themselves. There was a need for collective assistance by interested organizations.

The deputy chief of the Agricultural Administration, I. Obukhov, stated that the complex's production cycle would not be a closed one: the clients did not plan to create a department for the reproduction of young stock. There were various reasons for this. They questioned the need for the subsidiary farm having a complete cycle. It would be easier to purchase the young stock and thereafter to fatten them. Moreover, in accordance with the sanitary norms for complexes where fattening is carried out mainly on the basis of food waste products, the veterinary service forbids the maintenance of brood stock. The Pankratov Association supplies the complex with young stock, but it is unable to supply the enterprise at Ukhtinka in conformity with its planned capability. And other farms are also unable to furnish assistance: the number of swine in the oblast is not very great.

By no means is the situation a simple one: indeed, at the present time there are more than 4,000 empty billets in the departments of the complex. "But even if this was the only problem" stated G. Robustov, "there would still not be sufficient feed for the swine on hand."

Prior to the construction of the complex, it was planned that 60 percent of the animal ration would consist of food waste products and 40 percent -- concentrated feed. And whereas the food waste products obtained from dining halls and the population last year amounted to approximately 10,000 tons, 8,000 tons of concentrates, neither more nor less, were fed to the animals. True, the food waste products came from the city's processing enterprises, but nevertheless the figures give cause for reflection. The subsidiary farm, which should make full and exclusive use of the oblast's internal resources, is being supplied 100 percent with young stock obtained from state enterprises and concentrated feed -- almost 50 percent -- but nevertheless from state funds.

The specialists at Penza stated unanimously that the enterprises do not have their own land for feed production and that the swine cannot be fed food waste products alone.

Each day the complex receives malt residues, whey, brewing waste and maltose cake from processing and food enterprises in the city. These products contain large amounts of plant protein. But such waste products are available only in small quantities. And the deliveries cannot be increased: the waste products are distributed and the complex receives only a portion of them.

What is there to say? Yes, the oblast organizations tolerated blunders in the creation of this complex. And, as is apparent, the difficulties are at hand. It is possible that the Penza experience will serve to restrain workers in other oblasts from engaging in large-scale operations. But what about the Penza workers themselves? Will they find a solution for their problem? I am confident that they can. The city has reserves and considerable ones. The workers at the complex and the leaders of interested oblast organizations recognize this fact. Here are the reserves: food remnants collected from the population. Their proportion of the overall feed balance is still small. A cost accounting office was recently created in Penza for the procurement of unplanned feed. But even taking into account the fact that it has been in operation for only a short period of time and its production base is weak, the office must supply more and better quality waste products than it is presently doing. This is an important matter. In the Basic Directions approved by the 26th Party Congress, emphasis is placed upon the need for making more complete use of food remnants. The task for Penza is a fully attainable one, especially in view of the fact that the foundation has already been laid.

A question arises: how should the complex be managed? The feeding stable was erected for the city's public catering system consisting of more than 400 dining halls, with one half being located at industrial enterprises. Agreement has been reached: the products will be distributed depending upon the contribution made by each enterprise.

But this is not all. Assistance for the complex from the partners is not a one-time act. Particularly in view of the fact that the enterprises plan to obtain

meat on a regular basis. If each of the plants had its own swine farm, for example, for 200-300 animals, such farms would require expenditures for their maintenance. But what about this particular case? The complex is an independent cost accounting enterprise that has been transferred over to the balance of the administration and is not subordinate to the plants. According to what item will they bear the expense for its maintenance? It was here that a general interest and desire to collaborate was noted. A recommendation was advanced -- to organize a type of public board of directors for administering the complex. And each enterprise will bear expenses depending upon the satisfaction of its requirements for pork. It would be rather simple to determine these requirements -- according to the average number of diners in each dining hall. Only in this instance the enterprises could obtain funds from the ministries for satisfying the needs of the complex -- in essence for their collective subsidiary farm -- the required equipment, spare parts for equipment and so forth.

Permit me to add a few words now regarding the creation of a feed base for the subsidiary farms. Turning once again to the party documents of the congress, I read over the Basic Directions... The point is clear: "Devote special attention to ensuring that the farms have their own feed." Their own feed... And is it possible to obtain such feed for the enterprises of the city or oblast? The problem lies in the fact that neither the administration nor the partners have land at their disposal for the growing of forage crops. But the situation is also not hopeless. The personnel think, search and propose.

The head of a department of the oblast CPSU committee, V. Reva, stated that there is land throughout the oblast that has been developed to only a weak degree by the sovkhozes and kolkhozes. These are tracts consisting of 10-15 hectares. They are in bad need of restoration. If they are transferred over to enterprises which lack experience in developing land and which have no special equipment, then these hectares will remain unused owing to the fact that they are dispersed throughout the oblast and a great amount of work is required in order to restore them. Or they will be transformed into an unproductive farm. A good solution must be found for this problem.

The specialists are fully of the belief that the agricultural departments of plants and factories should ideally be allotted land in a common tract. Here the young large-horned cattle and swine stock will be reproduced and turned over to the complexes for fattening. Of equal importance is the need for ensuring that the cultivation of forage crops will commence on this land. The internally produced concentrated feed will be shipped to the suburban subsidiary farms.

"We cannot stop when the job is only half done. The first important step has been taken: subsidiary farms have been created for fattening purposes" noted the deputy chairman of the oblast executive committee, A. Vlasov, "but we require authorization by the appropriate republic organizations regarding the allotment of land to the enterprises."

Other facts underscore the need for solving this problem. The cooperation specialists are playing a dual role at the present time. A complex for the fattening of large-horned cattle has been built in the settlement of Grabovo. It was erected on the basis of shares and involved the participation of industrial

enterprises and oblpotrebsyuz [oblast union of consumers' societies]. The procurement offices purchase young bulls from the population and fatten 2,000 animals annually on malt residue which a neighboring distillery supplies. Coarse feed is also provided -- straw, silage and also concentrates.

The director of the fattening base, G. Korotin, stated that the feed either is provided from funds or is purchased; the farm does not have its own land.

I wish to make one main point: the experience of the Ukhtinka and Grabovo complexes is important -- they are the pioneers. They will be followed by others: modern fattening plants are being built on a share basis at trusts and dining halls throughout Penzenskaya Oblast. At Kamenka -- for 1,500 swine, at Serdobsk -- for 3,000, at Kuznetsk -- for 4,500 and at Nikol'sk -- for 1,000.

It is fine that these are being built and yet this is only the first step. On the agenda -- the creation of a strong feed base.

7026

CSO: 1824/406

AGRICULTURAL MACHINERY AND EQUIPMENT

MINITRACTOR FOR PRIVATE PLOTS

Need for Small Tractors Expressed

Moscow TRUD in Russian 18 Mar 81 p 2

[Article by A. Bondarenko, chairman of the Omskaya Oblast Professional Trade Union Committee for Agricultural Workers, Omsk: "What Will Be Used for Plowing the Garden?"]

[Text] At the Petrovskiy Sovkhoz in Omskiy Rayon, there are 40 tractors in use on the private plots. At the present time, it is difficult to say who it was that had the first "homemade unit": four wheels attached to a frame and a small Druzhba motor. But once the tractor appeared, the specialists began contriving miniature mowers, miniature rakes and other agricultural implements for use with it, implements which make it possible, with fewer labor expenditures, to till the gardens and provide feed for the privately maintained animals. Is this good? Yes, it would appear to be a good development. However, the management of the sovkhoz is keeping a very watchful eye on such amateur activity. Let us investigate this matter more thoroughly.

At the Petrovskiy Sovkhoz there are 36,962 hectares of meadow and arable land and more than 4,000 hectares of swamp land and land that is unsuitable for hay making. Nothing can be accomplished here using large items of equipment. Even a horse-drawn hay mower cannot turn around and many livestock must be maintained. There are more than 1,500 cows and calves alone and 1,179 sheep. It is not an easy matter to feed such a herd and the sovkhoz, in view of its concern for public animal husbandry, is at times unable to furnish assistance to all in procuring feed, particularly elderly people and invalids. How are others solving this problem? With their scythes on their shoulders, they move out onto the haying fields. It is not easy to obtain hay from swamps and coppices. Thus the people began giving thought to alleviating their labor.

Even this homemade tractor is clumsy and yet it is being praised throughout the countryside. And why not: its use makes it possible to procure hay for the entire winter in just 3-4 days, whereas 15-20 days are required to carry out this work manually.

Many individuals have become attracted to this type of rationalization work. They visit cities where they are able to purchase parts and units (quite often stolen

goods) at fairs, they redesign their own motorcycles and by hook or by crook they procure the required motors and frames. It must be confessed that quite often they take advantage of the "services" offered by the sovkhos' machine yard and appropriate anything that appears to be lying around unused. Thus the leaders of the sovkhos are dissatisfied: here and there, spare parts and machine units belonging to the sovkhos are beginning to disappear.

"During the autumn" stated the chief engineer of the sovkhos A. Bott, "we repaired a combine out on a field and left it there until morning. During the night however, somebody removed the rear axle."

Such are the costs of this "rationalization work." There can be no doubt but that a campaign must be waged against such theft and plundering of property and the force of law applied. But the root of the problem must also be examined. The industrial enterprises must satisfy more completely the requirements of the peasants. Judge for yourself: there are only 40 "homemade" units for 1,090 yards at the Petrovskiy Sovkhos -- a paltry number. We held discussions with many of the sovkhos workers and with kolkhoz members of other farms throughout the oblast and they were all of the same opinion: such equipment is not available for sale in the stores.

The chief of the Department of Economic Goods of the Omskaya Oblast Union of Consumers' Societies A. Bagayev read to us a reply received from the USSR Central Union of Consumers' Societies, to which a request had been sent for the sale of a motorized mower by a war veteran residing in the settlement of Novotroitskoye in Omskiy Rayon, D. Pervykh. The Central Union made a very vague promise.

"Last year" stated A. Bagayev, "Omskaya Oblast did not receive one mower. And this year it will not receive any. In the case of miniature tractors, we should be supplied with five units this year. But this is only a drop in the bucket."

And there were individuals who despaired of ever being able to purchase suitable and practical motorized mowers in a store and undertook to make their own. They are by no means perfect, they involve violations of the technical norms and yet they furnish great assistance during the difficult period of haymaking.

Nor is the problem restricted to only mowing machines. The situation is no better with regard to other agricultural implements employed on the private plots and private orchards. Bagayev showed us a catalog of manual and mechanized orchard and garden instruments, implements and light mechanization equipment used in agricultural work, published by the Ministry of Tractor and Agricultural Machine Building. Nothing is missing! Ridging plows, cultivators, manual sowing machines, mixers for preparing soil mixtures. It is more of a dream than a catalog.

"On paper it constitutes a long list" stated Aleksey Ivanovich, "but there is almost nothing available for sale. For example, take the miniature tractors. Tsentrosoyuz [USSR Central Union of Consumers' Societies] has reported that only 250 units have been made available for the entire republic."

Aleksey Ivanovich sighed, leafed through the catalog once again and added rather bitterly:

"Yes, it is well that a tractor or motorized mower is available there. There is a shortage of conventional scythes. Oblpotrebsoyuz [oblast union of consumers' societies] ordered 20,000, but we were supplied with only 13,000. It is believed that one scythe is sufficient for two yards. The situation is very poor with regard to shovels and other agricultural implements.

Certainly, a great deal can be accomplished at the site. A hydraulic drive plant in Omsk held a meeting with the horticulturists: it mastered the production of suitable field wagons equipped with tanks and a metal parts plant is commencing the production of shovels. Certainly however, the oblast is incapable of mastering the production of a wide assortment of light equipment and implements.

Last year the oblast's cooperation specialists had the population fill in a questionnaire. It revealed that sharp increases had taken place in the number of kolkhoz members and sovkhos workers desiring to maintain livestock on their private plots and also in the number of city dwellers desiring to have their own garden tracts. If the private plots are to furnish a maximum return, then a broad assortment of light mechanization equipment and agricultural implements must be made available as rapidly as possible. It is in this area that the Ministry of Tractor and Agricultural Machine Building and Goskomsel'khoztekhnika must furnish assistance.

Advantages of Minitractor Described

Ashkhabad SEL'SKOYE KHOZYAYSTVO TURKMENISTANA in Russian No 5, May 81 p 30

[Article: "A Tractor -- For All"]

[Text] Ufa. An experimental group of miniature tractors, for use in orchards and gardens, has been produced at the Ufa Machine Building Plant.

The new machine possesses certain advantages over its predecessor unit. It weighs less, it has good cross country capability and it comes equipped with a suitable field wagon. It has a six horsepower motor and its speed of movement is 8 kilometers per hour. This miniature tractor is referred to as a jack of all trades. It can plow, mow, transport freight, spray trees and saw wood.

Minitractor in Production

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 25 Jun 81 p 2

[Article: "Assistance for Gardeners"]

[Text] In a paragraph published under the headline "Assistance for Gardeners" (issue for 29 January of this year), it was stated that the time was at hand for producing miniature tractors equipped with a set of towing equipment, for tilling the private plots, private orchards and gardens of workers.

In the official reply to this paragraph, the chief of the technical administration and member of the Board of Minsel'khoz mash [USSR Ministry of Tractor and Agricultural Machine Building, I. Ksenevich, reports that industry is presently

developing a two-wheeled walking-riding tractor having gasoline motor with a power rating of 5-7 horsepower and also a set of agricultural implements for it. The first group of motorized units having a set of implements for it will be produced in 1981.

Problems of Cost, Demand

Moscow KOMSOMOL'SKAYA PRAVDA in Russian 25 Jul 81 p 2

[Article by G. Gallay, Solnechnogorsk - Moscow: "A Garden Tractor"]

[Text] Add gas! -- turn the handle grip towards yourself. Less gas! -- have you ever driven a motorcycle? No -- not bad for the first time.

By no means is the unit a motorcycle. It resembles more a two-wheeled wheelbarrow, despite the fact that the motor and gas handle grip were taken from a motorized carriage. The motor is installed between the wheels. A plow is attached to the frame on which the motor is mounted. And the entire construction is referred to as a motorized unit.

Our story concerns the first competitive inspection for amateur designers of miniature tractors and motorized units. It was held in Solnechnogorsk at the Central Machine Testing Station (the inspection was carried out within the framework of a competition announced by the Komsomol Central Committee. This competition was announced in this newspaper on 21 June of this year).

And it took place as follows. All of the designs were delivered to the field aboard a truck and unloaded. The authors participated in the inspection and dismantled their own mechanisms. They arranged them out under the burning sun. Each alongside its future furrow. Nobody cut a ribbon and there was not orchestra to play a furrow. Nevertheless, everybody was very excited.

The blue miniature tractor of Nikolay Nesterenko from Klin was the first to be summoned out onto the field. Nikolay is 25 years of age. He works as a compressor mechanic. His wife is a mechanic for a tower crane; they have two children. They have their own private plot. He does not view the tractor as a toy. Together with his wife, he assembled it from scrap metal over a period of 5 months. He is now thinking of designing a motor vehicle. Two individuals in particular, 18 and 14 years of age, liked the tractor very much. They could themselves plow their plot using such a machine. In addition to his own plot, Nikolay also plows the plots of neighbors.

The Abramovs, father and son, move up to the starting line. They have a single-wheel motorized unit having a motor obtained from a Vyatka. The design is simple but heavy. The unit weighs 70 kilograms.

All were surprised by the invention of A.P. Larionov from Kalininskaya Oblast -- a caterpillar tractor -- small, spry and very maneuverable. It can turn around on a furrow in just 10 seconds.

The motorized unit which I tried out belongs to N.V. Pronin. He is receiving letters containing requests for the plans. He replies to almost all of them. For

those interested in his motorized unit, we herewith provide N.V. Pronin's address: Tul'skaya Oblast, Leninskiy Rayon, Kurakovo Post Office.

The workers at the TsMIS [Central Machine-Testing Station] measured the depth of the plowing and took note of the time with the aid of a stop-watch. The last participant laid out his furrow and the members of the jury went off to a small shed to summarize the results. We ourselves will summarize some of the results.

Our country has a great requirement for miniature equipment. In addition to large fields, we have many so-called small "unsuitable" tracts of land. The specialists have estimated that we have 90 million hectares of such "unsuitable" land. Small tractors are required for tracts of land attached to schools.

The number of hothouses has increased. The director of the Pobeda Sovkhoz at Klin, V.Ya. Volodin, told me: "This is an important problem owing to the fact that nobody is concerning themselves with the use of light mechanization for the inter-row and principal tilling of soil in greenhouses."

But V.Ya. Volodin was not entirely correct in this regard. It was more than 20 years ago that the first Rioni-2 motorized unit was created at the Kutaisi Miniature Tractor Plant imeni Konstitutsiya SSSR for the tilling of "unsuitable" land and hothouses. This "new innovation" weighed more than 200 kilograms and had an obsolete appearance. Moreover, it was expensive: together with its towed mechanisms, it cost more than 2,000 rubles. Thus there were not many who wished to purchase it for private use. Nor do I believe that this was so because of its obsolete design.

The competitive inspection held at Solnechnogorsk once again confirmed that the private plots require light mechanization equipment. But regardless of whomever I asked, nobody was able to tell me exactly -- what is the demand for this equipment, where can it be repaired and how can it be used best? At what price should it be sold so as not to repeat the Rioni-2 experience?

Indeed, regardless of how cheap our agricultural equipment is, the cost of a miniature tractor will be no less than 1,000 rubles. And this is without towed implements: plows, harrows, pumps, field wagons. Moreover, the tractor must not be operated more than 2-3 weeks a year. I asked N.V. Pronin how many times a year he used his motorized unit. In the spring he plows for his potatoes and thereafter he plants them. He hills up the potatoes twice and then he digs them up. That is all.

At the Ministry of Agriculture it is believed -- and it is a customer -- that the requirement for miniature equipment for the five-year plan is 30,000 motorized units. USSR Gosplan provided me with other figures. Following modernization of the Kutaisi plant, the annual production by the end of the five-year plan will be 35,000 motorized units and 15,000 miniature tractors.

Tsentrosoyuz [USSR Central Union of Consumers' Societies] is closest of all or at least should be closest of all to the consumer. The All-Union Scientific Research Institute of the Economics of Cooperative Trade conducted an interrogation mainly in the Ukraine, where there are large private plots. Questionnaires were filled out by 2,883 families. Only 24.1 percent of those interrogated considered it possible to

pay 1,000 rubles for a motorized unit. If the price were higher, this figure would decrease by one half.

I am writing about these points so as to be able to make a true evaluation of the present requirements of agriculture for light mechanization. But let us return to the competition. The jury summarized the results. Taking into account the simplicity of production, the multi-purpose nature and the ease with which the models could be controlled, gold diplomas were awarded to A.P. Larionov for his caterpillar tractor and to N.M. and S.N. Abramov and also N.V. Pronin for their motorized units.

The tractor of N. Nesterenko was singled out for its originality. But, as the jury mentioned, it was very complicated for a "homemade" production. And why was this tractor not recommended for industrial production? Indeed, the goal of the competition is not just to find out what an individual is capable of doing. The final result is to recommend the best models for industry.

7026

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TILLING AND CROPPING TECHNOLOGY

AREAS OF SOYBEAN CULTIVATION IN THE UKRAINE

Moscow EKONOMIKA SEL'SKOGO KHOZYAYSTVA in Russian No 6, Jun 81 pp 39-42

[Article by N. I. Dvoryadkin, doctor of economic sciences, professor and director of the All-Union Scientific Research Institute of Oil-Producing Crops, and N. M. Zhadanov, candidate of economic sciences and senior scientific worker at the All-Union Scientific Research Institute of Oil-Producing Crops: "On the Rational Distribution of Soybeans in the Ukraine"]

[Text] During the past few years, soybean production in the Ukraine has increased considerably. Compared to the 1966-1977 period, when the average annual area employed for soybeans was 3,300 hectares, during the 1971-1975 period the figure was raised to 10,400 hectares and by 1979 it had increased to 57,600 hectares. The seed yield increased from 6.3 quintals per hectare during the 1966-1970 period to 9 quintals during the 1976-1979 period. During this period the gross yield of seed increased from 2,100 to 31,500 tons. The republic's kolkhozes and sovkhoses have been assigned the task of raising soybean production to 300,000 tons by 1985.

For carrying out this task and in addition to expanding the sowing area, it will be necessary to obtain high and stable yields. This requires first of all a determination of those regions where the moisture conditions and the heat regime in the soil meet the biological requirements of the crop. Unfortunately, in 1979 57,600 hectares of soybeans were distributed among 17 oblasts, the climatic conditions of which did not meet the biological requirements in all areas.

Studies carried out by biologists have established the fact that soybeans can furnish high and stable yields only in those oblasts and rayons where 350-450 millimeters of precipitation fall during the growing season (190-200 millimeters during the period of blossoming and bean formation), the duration of the period with air temperatures in excess of 15° Centigrade is 130-150 days and where the average daily air temperature during the middle of the growing season reaches 21-23° Centigrade; the reaction of the soil substrate is neutral.

Taking into account the principal biological requirements with regard to the growing of different varieties of soybeans, three zones can be singled out within the republic's territory:

- 1) a zone of more favorable and stable soybean production under non-irrigation conditions;

- 2) a zone of unstable soybean production under non-irrigation conditions;
- 3) a zone of feasible soybean production only under irrigation conditions.

The first zone includes Zhitomirskaya, Rovenskaya, Volynskaya, Khmel'nitskaya and Ternopol'skaya Oblasts (rayons falling with the forest-steppe zone), L'vovskaya, Ivano-Frankovskaya and Chernovitskaya Oblasts (rayons falling within the pre-Dnestr soil-climatic zone, Zakarpatskaya Oblast (excluding the mountainous zone) and also those rayons in Vinnitskaya Oblast which adjoin Khmel'nitskaya Oblast.

According to data accumulated over a period of many years, 345-484 millimeters of precipitation fall during the growing season in the first zone (May - September), including 145-190 millimeters during the period of blossoming and bean formation (July - August). Such an amount of precipitation, as revealed in the studies by V.B. Yenken (1963) and V.M. Stepanova (1972), ensures intensive soybean growth and development and eliminates the shedding of the blossoms and beans (see Table 1).

The availability of adequate moisture for soybeans in the first zone is borne out by the hydrothermal coefficient, which fluctuates from 1.4 to 1.7. According to studies carried out by V.B. Yenken (1959), an adequate average daily air temperature during the period of blossoming and seed formation (mainly in July) is on the order of 18-20° Centigrade. The duration of the period of effective temperatures (higher than 15° Centigrade) is 100-117 days. This makes it possible to obtain certified seed for early ripening varieties. The frost-free period and also the period in which the temperatures are higher than 10° amount to 160-165 days and this is sufficient for the midseason ripening varieties.

Low-humus podzolized deep chernozem soils, which are completely suitable for the cultivation of soybeans, are employed most extensively in the first zone. Thus the soil-climatic conditions in the group of oblasts under review make it possible to grow soybeans in the absence of irrigation and to obtain high yields of the seed. This is convincingly borne out by data accumulated over a period of many years by the state strain testing network and by the experience of kolkhozes engaged in the growing of this crop. During 3 years of variety testing (1973-1975) at the Novoushitskiy GSU [gosudarstvennyy sortoispytatel'nyy uchastok; state strain testing station] in Khmel'nitskaya Oblast, an average of 17 quintals of seed per hectare was obtained and at the Gorodenka GSU in Ivano-Frankovskaya Oblast during 1973-1974 -- 16 quintals per hectare. At the Berdichev GSU in Zhitomirskaya Oblast, the average cropping power for Terezinskaya 24 during 1973-1974 was 16.8 quintals per hectare. At the Kolkhoz imeni Suvorov in Novoselitskiy Rayon in Chernovitskaya Oblast, the average seed yield over a period of 4 years (1972-1975) was 22.3 quintals per hectare.

In the near future, the kolkhozes and sovkhozes in the first zone must become the principal producers of soybeans under non-irrigation conditions. However, in 1979, only 9.9 percent of the sowings of this crop were carried out here and only 12.7 percent of the republic's seed was produced here.

One reason for the delay in expanding the soybean sowings in the first zone is the widespread opinion among individual agricultural workers that it is impossible to achieve ripening or obtain a full-value crop of seed prior to the onset of the

TABLE 1

Precipitation and Temperature Regime in a Zone of Stable Soybean
Production Under Non-Irrigation Conditions

Oblasts	Precipitation, mm		Hydrothermal Coefficient* for May - September	Duration of Period (days) With Air Temps. Higher Than		Total Amount of Average Daily Air Temps in excess of		Average Monthly Air Temp. in July
	May - September	July - August		10°C	15°C	10°C	15°C	
Zhitomirskaya	345	145	1.4	160	108	2459	1868	18.7
Rovenskaya	354	155	1.4	162	105	2452	1818	18.5
Khmel'nitskaya	360	153	1.4	166	115	2520	2049	19.6
Volynskaya	368	170	1.5	160	100	2367	1750	18.8
Ternopol'skaya	372	174	1.5	164	108	2481	1882	18.3
Chernovitskaya	392	166	1.5	168	117	2572	2089	19.2
L'vovskaya	401	183	1.7	161	100	2388	1717	18.0
Ivano-Frankovskaya	412	180	1.7	165	103	2471	1804	18.8
Zakarpatskaya	484	191	1.7	195	139	2827	2525	21.1

* Hydrothermal coefficient -- the quotient obtained from dividing the total amount of precipitation during a definite period by the total amount of temperatures, reduced by a factor of 10.

autumn frosts. As early as 1963, by which time plant breeders L.F. Nekrasova and A.K. Leshchenko at the Kiev Experimental Station for Animal Husbandry had already created the soybean variety Terezinskaya 2, L.F. Nekrasova wrote: "Many are of the opinion that favorable conditions for the growing of soybeans are lacking in the northern forest-steppe zone of the UkSSR. Actually, such widely known varieties as VNIIMK 9186, Kubanskaya 4958, VNIISK 1 and others similar to these should not be introduced into production operations in this zone owing to the fact that they ripen late. The Terezinskaya 2 soybean variety, during years characterized by normal weather conditions, ripens completely during the middle of September, at which time, under the conditions found in the northern forest steppe zone, a sufficient number of days still remain for the normal carrying out of the harvest work" (Soybeans. A collection of articles. Edited by V.B. Yenken. Publishing House for Agricultural Literature, Journals and Placards. Moscow, 1963, p 230).

The Ukrainian plant breeders created such early ripening varieties as Kiyevskaya 71, Iskra, Zarnitsa, all having a growing season of from 110 to 127 days, or 20-27 days less than that for the regionalized varieties (Kel'menetskaya 2, Peremoga and Chernovitskaya 5). Moreover, the cropping power of the new varieties, according to data supplied by N.Ya. Koval'chuk, surpasses the cropping power of the Kel'menetskaya 2 variety (standard) by 6-7 quintals per hectare (Bulletin of Scientific-Technical Information on Oil-Producing Crops. Krasnodar, VNIIMK [All-Union Scientific Research Institute of Oil-Bearing Crops], 1977, Issue 4).

The introduction of early ripening and midseason ripening varieties of soybeans having a growing season of 115-130 days will enable the kolkhozes and sovkhoses,

TABLE 2

Precipitation and Temperature Regime in a Zone of Unstable Soybean
Production Under Non-Irrigation Conditions

Oblasts	Precipitation, mm		Hydrothermal Coefficient for May - September	Duration of Period (days) With Air Temps. Higher Than		Total Amount of Average Daily Air Temps in Excess of		Average Monthly Air Temp. in July
	May - September	July - August		10°C	15°C	10°C	15°C	
Poltavskaya	254	110	1.0	162	118	2613	2166	20.0
Khar'kovskaya	267	113	1.0	160	116	2636	2152	21.5
Cherkasskaya	265	117	1.0	160	114	2608	2145	20.0
Sumskaya	281	121	1.1	155	110	2526	1980	19.5
Kiyevskaya	288	127	1.1	160	108	2491	1899	18.9
Vinnitskaya	298	125	1.2	157	100	2449	1830	18.0
Chernigovskaya	310	140	1.2	151	100	2496	1927	19.8

assuming proper observance of the cultivation technology, to obtain stable and high (15-20 quintals per hectare) yields of seed, suitable not only for commodity but also for seed purposes. In 1979, 18 percent of the republic's sowings of peas were carried out at kolkhozes and sovkhoses in the first zone of the forest-steppe region and in the Poles'ye region -- 59 percent of the feed lupine. This made it possible to solve the problem of producing high protein feed.

The second zone includes Vinnitskaya (rayons not included in the first zone), Cherkasskaya, Poltavskaya, Khar'kovskaya, Kiyevskaya, Chernigovskaya and Sumskaya Oblasts (excluding those zones included in the soil-climatic zones of the Poles'ye region).

In terms of heat availability, the second zone differs very little from the first. The average monthly air temperature in July is 18-21.5°C, the total amount of temperatures higher than 10°C is 2449-2636 and higher than 15° -- 1830-2166°C and the duration of the period of effective temperatures fluctuates from 100 to 118 days.

However, the second zone is considerably inferior to the first in terms of moisture availability. During the growing season, 254-310 millimeters of precipitation fall in the second zone, or 27.4-31.1 percent less than the amount required; during the period of blossoming and bean formation -- 110-140 millimeters, or 30-42 percent less than the amount needed (see Table 2).

A low amount of precipitation leads to a reduction in the number of blossoms and beans and to subsequent and partial shedding of the beans. As a result, the seed yield in the second zone is considerably lower than that obtained from the first zone. Thus, at kolkhozes and sovkhoses in the first zone and on the average for a period of 5 years (1975 - 1979), the cropping power for soybeans was 11.1 quintals per hectare and in the second zone -- only 3.4 quintals per hectare, or less by a factor of 3.3.

Only during certain years, when the amount of precipitation during the soybean growing season exceeds the level established over a period of many years, do the

farms obtain 10-12 quintals of soybean seed per hectare. However, an adequate amount of precipitation is available only in 1 year of every 4. Thus the effect of favorable heat resources and good soil (low and average humus deep chernozem soils) is unable to manifest itself fully. Nevertheless, in 1979, 14.4 percent (8,300 hectares) of the republic's overall soybean sowings were located on farms in this zone.

TABLE 3

Precipitation and Temperature Regime in a Zone of Feasible Soybean Production Only Under Irrigation Conditions

Oblasts	Precipitation, mm		Hydrothermal Coefficient for May - September	Duration of Period (days) With Air Temps. Higher Than		Total Amount of Average Daily Air Temps. in Excess of		Average Monthly Air Temp. in July
	May - September	July - August		10°C	15°C	10°C	15°C	
Krymskaya	118	52	0.4	182	126	2788	2413	21.1
Khersonskaya	148	56	0.5	177	136	2946	2707	22.8
Nikolayevskaya	170	74	0.6	171	125	2757	2392	21.2
Zaporozhskaya	175	78	0.6	173	133	2907	2641	22.6
Odesskaya	199	73	0.7	177	127	2786	2495	21.2
Dnepropetrovskaya	219	93	0.8	166	122	2736	2310	21.1
Donetskaya	230	96	0.8	166	121	2719	2220	21.1
Voroshilovgradskaya	237	94	0.9	163	120	2754	2320	21.6
Kirovogradskaya	236	98	0.9	167	121	2650	1918	20.5

In the second zone, the problem of plant protein production must be solved through the growing of peas. During the 1975-1977 period, the seed yield from peas at kolkhozes in the second zone was 26 quintals per hectare, or 8-9 quintals more than in the first and third zones. In 1979, 44.5 percent of the republic's pea sowings (456,600 hectares) were located in the zone under review.

The third zone includes Krymskaya, Khersonskaya, Nikolayevskaya and Odesskaya Oblasts in Yuzhnyy Rayon and also Zaporozhskaya, Donetskaya, Voroshilovgradskaya, Dnepropetrovskaya and Kirovogradskaya Oblasts in the Donetsko-Pridneprovskiy Rayon.

The most favorable heat regime is to be found here. The average daily air temperature in July fluctuates from 20.5 to 22.8°C. The total amount of temperatures higher than 10°C is on the order of 2650-2946°C and higher than 15°C -- on the order of 1918-2707°C. The duration of the period of effective air temperatures is 120-136 days. Such a duration for this period and the total amount of effective temperatures make it possible to grow not only early ripening but also midseason to late ripening varieties that are characterized by a raised productivity. However, here there is a deficit of moisture for the growing of soybeans under non-irrigation conditions. Only 118-237 millimeters fall during the growing season and during the period of blossoming and bean formation -- 52-98 millimeters of precipitation (see Table 3).

During the soybean growing season, the moisture deficit in the zone is 47.3-48.6 percent and during the period of blossoming and bean formation -- 51-72.6 percent.

Such a moisture deficit, combined with a high air temperature during the summer period causes weak growth in the plants, a considerable loss in blossoms and beans and low cropping power. Soybeans require irrigation if high and stable yields are to be obtained.

The combining of soils (mainly medium and low humus chernozem soils) that are favorable for soybeans with irrigation is making it possible to obtain more than 20 quintals of seed per hectare. This is convincingly borne out by the experience of kolkhozes in Krymskaya Oblast. Thus, during the 1976-1977 period and on the whole for the kolkhozes in Krasnogvardeyskiy Rayon, the cropping power was 20.3 quintals per hectare for an area of 992 hectares, at the Druzhba Narodov Kolkhoz -- 21.5 quintals for an area of 502 hectares and at the Kolkhoz imeni Lenin -- 29.4 quintals per hectare for an area of 75 hectares.

In 1979, more than 75 percent of the republic's sowings of this crop were located in the third zone. However, the soybeans were grown under irrigation in only two oblasts (Odesskaya and Krymskaya). In the remaining oblasts, the majority of the kolkhozes and sovkhoses are cultivating soybeans without irrigation.

The placement of soybeans in a zone marked by a large deficit of moisture and the cultivation of this crop in the absence of irrigation sharply lower the productive capabilities of the crop and at times can result in destruction of the plantings. Thus, in 1979, at kolkhozes and sovkhoses in Zaporozhskaya and Nikolayevskaya Oblasts, the cropping power for soybeans on an area of 9,100 hectares was 5.3 quintals per hectare, in Kirovogradskaya Oblast on an area of 6,500 hectares -- 4 and on individual farms -- less than 2 quintals per hectare.

If there are no irrigated lands on the farms in the southern oblasts of the republic, then the principal soybean sowings should be concentrated in those oblasts where the natural conditions make it possible to obtain high yields in the absence of irrigation.

The distribution of soybeans throughout the Ukrainian territory based upon the climatic and soil requirements of this crop and also observance of the cultivation technology -- these are the methods to be followed for increasing soybean production in the republic and lowering the costs for such production.

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